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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).

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Overview for Request: cder_mpl2p_wp021

Request ID: cder_mpl2p_wp021

Request Description: In this request, we assessed the risk of angioedema associated with sacubitril/valsartan (SV) compared to angiotensin-converting enzyme inhibitors (ACEIs) or to angiotensin II receptor blockers (ARBs, excluding SV) among heart failure patients in the Sentinel Distributed Database (SDD).

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) and Propensity Score Analysis (PSA) tools, version 9.7.0, with ad hoc programming

Data Source: The study period spanned from July 7, 2015 to February 29, 2020. We distributed the analytic package to five Data Partners (DP) on January 13, 2021. This report contains aggregated data from five DPs for which the propensity score estimation models converged across all comparisons. See Appendix A for a list of the latest dates of available data for each DP included in this report.

Study Design: We identified individuals with incident use of SV, ACEIs, and ARBs who were 18 years or older with a history of heart failure and evaluated the occurrence of angioedema and serious angioedema during exposure episodes. We then conducted a PSA comparing the SV users to the ACEI or ARB users, matching and stratifying on propensity score. This is a Type 2 analysis using the Propensity Score Analysis module in the Query Request Package (QRP) documentation.

Exposure and Comparator: We defined exposures of interest as new use of SV, ACEIs, and ARBs. The exposure drugs were defined using National Drug Codes (NDCs). For a list of generic and brand names of medical products used to define the exposure and comparator drugs, please see Appendix B.

Outcomes of Interest: We defined our main outcome of interest, angioedema, as an angioedema diagnosis code recorded in any diagnostic position of an inpatient, emergency department, or outpatient encounter. We defined our secondary outcome of interest, serious angioedema, as an angioedema diagnosis recorded in any diagnostic position of an inpatient or emergency department encounter with evidence of an intensive care unit admission, intubation, tracheostomy, or laryngoscopy occurring within two days of the hospital admission or emergency department visit. We defined our outcomes using International Classification of Diseases, Ninth and Tenth Revisions, Clinical Modification (ICD-9-CM and ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System, Level II (HCPCS). For a list of codes used to define outcomes, please see Appendix C.

Cohort Eligibility Criteria: We required patients 18 years or older to be enrolled in plans with both medical and drug coverage for at least 183 days before index dispensing, during which gaps in coverage of up to 45 days were allowed and treated as continuous enrollment. New use of ACEI or ARB was defined as no use of SV, ACEIs, or ARBs in the 183 days preceding the index dispensing (index date). New use of SV was defined as no use of SV in the 183 days preceding the index date, in addition to prior or ongoing use of the comparator (ACEIs or ARBs, evidenced by dispensing date or days supply) in the 183 days preceding and including the index date; a sensitivity analysis alternatively required prior or ongoing use of the comparator in the 14 days preceding and including the index date. We included patients with evidence of heart failure in the 183 days preceding and including index date. We excluded patients from the cohort if they had evidence of a dispensing for the other two exposures on their index date. Incidence, inclusion, and exclusion criteria were defined using ICD-9-CM and ICD-10-CM diagnosis codes. For a list of generic and brand names of medical products and specific diagnosis codes used to define cohort eligibility, please see Appendices D and E.

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Follow-up: We determined follow-up time based on the length of the exposure episodes and censored upon prespecified criteria. We created exposure episodes using outpatient pharmacy dispensing data. We bridged together exposure episodes less than 14 days apart and added 14 days at the end of each exposure episodes to create continuous treatment episodes. A sensitivity analysis shortened the episode gap and episode extension to 7 days. Follow-up began on the day of exposure initiation and continued until the earliest of any of the following: 1) outcome occurrence; 2) requester-defined censoring criteria -- initiation of any of the other two study drugs or after 365 days of continuous exposure; 3) disenrollment; 4) recorded death; 5) end of exposure episode; 6) end of query period; or 7) end of available data. Only the first valid exposure episode that occurred during the study period was included per patient, with the exception for one-time cohort reentry from the comparator to SV group upon initiation of SV during the first comparator exposure episode *plus* when new use criteria of SV was satisfied.

Baseline Covariates: Please refer to Appendices F, G, and I for a list of covariates, codes, and evaluation windows used to defined covariates.

Propensity Score Estimation: For each comparison, we fit a logistic regression model to estimate the propensity score (PS) based on potential confounders and risk factors outlined in Appendix J. The matching ratio for the PS was 1:1 and the matching caliper was 0.05. Exposure and comparator episodes were nearest neighbor-matched without replacement. We also used PS stratification (deciles) for our main analyses comparing SV to ACEIs and ARBs and risk of angioedema. For each comparison, we used risk set-based approach to estimate the hazard ratio and 95% confidence intervals for the unadjusted analyses, unconditional and conditional matched analyses, and PS-stratified analyses. Subgroup analyses for effect estimation included angioedema diagnosis in 183 days prior to index date and separately, angioedema diagnosis in entire enrollment history prior to index date; serious allergies diagnosis in the 183 days prior to index date; sex; age group; race; and follow-up time.

See Appendices H and I for the specifications of parameters used in the analyses for this request.

Limitations: As with all observational studies, this evaluation was limited in its ability to control for all sources of potential bias. Algorithms used to define exposures, outcomes, inclusion and exclusion criteria, and covariates are imperfect and may be misclassified. Therefore, data should be interpreted with this limitation in mind.

Notes: Please contact the e Sentinel Operations Center (info@sentinelssystem.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.sentinelssystem.org/projects/SENTINEL/repos/sentinel-routine-queryingtooldocumentation/browse>).

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**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.

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

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.

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 Analysis (PSA) Tool*

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

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.

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

Table 1a. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	69,639	100.0%	694,882	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	70.2	11.2	72.7	12.5	-2.563	-0.216
Age	Number	Percent	Number	Percent		
18-44 years	2,412	3.5%	21,587	3.1%	0.357	0.020
45-54 years	5,115	7.3%	45,057	6.5%	0.861	0.034
55-64 years	11,494	16.5%	97,244	14.0%	2.511	0.070
65+ years	50,618	72.7%	530,994	76.4%	-3.729	-0.086
Sex						
Female	21,199	30.4%	341,867	49.2%	-18.757	-0.390
Male	48,440	69.6%	353,015	50.8%	18.757	0.390
Race						
American Indian or Alaska Native	242	0.3%	4,525	0.7%	-0.304	-0.043
Asian	666	1.0%	7,871	1.1%	-0.176	-0.017
Black or African American	9,015	12.9%	92,098	13.3%	-0.308	-0.009
Native Hawaiian or Other Pacific Islander	66	0.1%	741	0.1%	-0.012	-0.004
Unknown	11,656	16.7%	99,645	14.3%	2.398	0.066
White	47,994	68.9%	490,002	70.5%	-1.598	-0.035
Hispanic Origin	1,351	1.9%	15,586	2.2%	-0.303	-0.021
Year						
2015	1,349	1.9%	87,092	12.5%	-10.596	-0.418
2016	10,510	15.1%	172,880	24.9%	-9.787	-0.247
2017	16,864	24.2%	156,573	22.5%	1.684	0.040
2018	19,077	27.4%	142,979	20.6%	6.818	0.160
2019	21,511	30.9%	133,608	19.2%	11.662	0.272
2020	328	0.50%	1,750	0.30%	0.219	0.037
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.2	2.7	5.8	3.0	-0.610	-0.214
	Number	Percent	Number	Percent		
Ambulatory allergies or allergy treatment	33,754	48.5%	320,699	46.2%	2.318	0.046
Angioedema (-183, -1)	83	0.1%	864	0.1%	-0.005	-0.001
Angioedema (ever, -1)	494	0.7%	7,317	1.1%	-0.344	-0.037
Diabetes	35,071	50.4%	326,005	46.9%	3.446	0.069
Ischemic heart disease	55,067	79.1%	432,968	62.3%	16.767	0.375
Renal disorders	27,364	39.3%	289,746	41.7%	-2.403	-0.049
Serious allergies	8,047	11.6%	110,960	16.0%	-4.413	-0.128

Table 1a. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	28,444	40.8%	252,983	36.4%	4.438	0.091
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	60,338	86.6%	458,102	65.9%	20.719	0.502
Everolimus	11	0.0%	183	0.0%	-0.011	-0.007
Nonsteroidal anti-inflammatory drugs (NSAIDs)	7,793	11.2%	88,957	12.8%	-1.611	-0.050
Sirolimus	*****	*****	208	0.0%	-0.018	-0.013
Health Service Utilization Intensity:	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	17.9	13.7	17.4	19.7	0.531	0.031
Mean number of emergency room encounters	0.7	1.4	0.9	1.8	-0.188	-0.115
Mean number of inpatient hospital encounters	0.8	1.1	1.0	1.2	-0.211	-0.186
Mean number of non-acute institutional encounters	0.2	0.8	0.4	1.1	-0.217	-0.235
Mean number of other ambulatory encounters	8.1	12.2	12.8	18.0	-4.732	-0.308
<i>Mean number of filled prescriptions</i>	<i>31.3</i>	<i>19.8</i>	<i>26.9</i>	<i>23.0</i>	<i>4.408</i>	<i>0.205</i>
<i>Mean number of generics</i>	<i>13.1</i>	<i>5.1</i>	<i>11.5</i>	<i>5.7</i>	<i>1.614</i>	<i>0.297</i>
Mean number of unique drug classes	11.4	4.5	10.8	5.0	0.626	0.131

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1b. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	69,639	100.0%	69,639	10.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	70.2	11.2	70.2	12.2	-0.019	-0.002
Age	Number	Percent	Number	Percent		
18-44 years	2,412	3.5%	2,717	3.9%	-0.438	-0.024
45-54 years	5,115	7.3%	5,694	8.2%	-0.831	-0.032
55-64 years	11,494	16.5%	11,900	17.1%	-0.583	-0.016
65+ years	50,618	72.7%	49,328	70.8%	1.852	0.044
Sex						
Female	21,199	30.4%	21,398	30.7%	-0.286	-0.006
Male	48,440	69.6%	48,241	69.3%	0.286	0.006
Race						
American Indian or Alaska Native	242	0.3%	242	0.3%	0.000	0.000
Asian	666	1.0%	662	1.0%	0.006	0.001
Black or African American	9,015	12.9%	9,043	13.0%	-0.040	-0.001
Native Hawaiian or Other Pacific Islander	66	0.1%	75	0.1%	-0.013	-0.004
Unknown	11,656	16.7%	11,662	16.7%	-0.009	-0.000
White	47,994	68.9%	47,955	68.9%	0.056	0.001
Hispanic Origin	1,351	1.9%	1,521	2.2%	-0.244	-0.017
Year						
2015	1,349	1.9%	1,255	1.8%	0.135	0.010
2016	10,510	15.1%	10,469	15.0%	0.059	0.002
2017	16,864	24.2%	16,928	24.3%	-0.092	-0.002
2018	19,077	27.4%	19,069	27.4%	0.011	0.000
2019	21,511	30.9%	21,555	31.0%	-0.063	-0.001
2020	328	0.50%	363	0.50%	-0.050	-0.007
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.2	2.7	5.2	2.6	-0.017	-0.006
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	33,754	48.5%	33,596	48.2%	0.227	0.005
Angioedema (-183, -1)	83	0.1%	92	0.1%	-0.013	-0.004
Angioedema (ever, -1)	494	0.7%	723	1.0%	-0.329	-0.035
Diabetes	35,071	50.4%	34,906	50.1%	0.237	0.005
Ischemic heart disease	55,067	79.1%	55,153	79.2%	-0.123	-0.003
Renal disorders	27,364	39.3%	27,495	39.5%	-0.188	-0.004
Serious allergies	8,047	11.6%	8,038	11.5%	0.013	0.000

Table 1b. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	28,444	40.8%	28,475	40.9%	-0.045	-0.001
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	60,338	86.6%	60,422	86.8%	-0.121	-0.004
Everolimus	11	0.0%	12	0.0%	-0.001	-0.001
Nonsteroidal anti-inflammatory drugs (NSAIDs)	7,793	11.2%	7,766	11.2%	0.039	0.001
Sirolimus	*****	*****	14	0.0%	-0.009	-0.007
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	17.9	13.7	17.9	20.5	-0.041	-0.002
Mean number of emergency room encounters	0.7	1.4	0.7	1.2	-0.003	-0.002
Mean number of inpatient hospital encounters	0.8	1.1	0.8	0.9	-0.011	-0.010
Mean number of non-acute institutional encounters	0.2	0.8	0.2	0.7	-0.006	-0.008
Mean number of other ambulatory encounters	8.1	12.2	8.2	11.0	-0.062	-0.005
<i>Mean number of filled prescriptions</i>	<i>31.3</i>	<i>19.8</i>	<i>28.2</i>	<i>22.9</i>	<i>3.118</i>	<i>0.146</i>
<i>Mean number of generics</i>	<i>13.1</i>	<i>5.1</i>	<i>12.2</i>	<i>5.7</i>	<i>0.922</i>	<i>0.170</i>
Mean number of unique drug classes	11.4	4.5	11.4	5.0	-0.041	-0.009

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1c. Weighted Baseline Characteristics of Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Propensity Score Stratified,

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	69,639	100.0%	694,882	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	72.1	11.4	72.6	12.5	-0.466	-0.039
Age	Number	Percent	Number	Percent		
18-44 years	1,968	2.8%	21,875	3.1%	-0.321	-0.019
45-54 years	4,182	6.0%	45,805	6.6%	-0.587	-0.025
55-64 years	9,832	14.1%	98,637	14.2%	-0.076	-0.002
65+ years	53,657	77.0%	528,564	76.1%	0.984	0.025
Sex						
Female	33,257	47.8%	330,693	47.6%	0.167	0.003
Male	36,382	52.2%	364,189	52.4%	-0.167	-0.003
Race						
American Indian or Alaska Native	396	0.6%	4,349	0.6%	-0.057	-0.007
Asian	724	1.0%	7,777	1.1%	-0.079	-0.008
Black or African American	8,622	12.4%	92,009	13.2%	-0.860	-0.026
Native Hawaiian or Other Pacific Islander	58	0.1%	732	0.1%	-0.023	-0.007
Unknown	11,379	16.3%	99,758	14.4%	1.984	0.092
White	48,459	69.6%	490,256	70.6%	-0.966	-0.025
Hispanic Origin	1,327	1.9%	15,544	2.2%	-0.332	-0.023
Year						
2015	7,015	10.1%	80,407	11.6%	-1.498	-0.048
2016	15,676	22.5%	166,839	24.0%	-1.499	-0.035
2017	15,798	22.7%	158,018	22.7%	-0.055	-0.001
2018	15,486	22.2%	147,402	21.2%	1.025	0.025
2019	15,371	22.1%	140,377	20.2%	1.871	0.046
2020	293	0.40%	1,839	0.30%	0.156	0.027
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.9	3.2	5.8	3.0	0.115	0.037
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	33,199	47.7%	322,089	46.4%	1.321	0.027
Angioedema (-183, -1)	76	0.1%	860	0.1%	-0.015	-0.004
Angioedema (ever, -1)	501	0.7%	7,303	1.1%	-0.331	-0.035
Diabetes	32,924	47.3%	328,219	47.2%	0.045	0.001
Ischemic heart disease	45,178	64.9%	443,528	63.8%	1.046	0.022
Renal disorders	29,955	43.0%	288,849	41.6%	1.446	0.029
Serious allergies	11,113	16.0%	108,563	15.6%	0.334	0.009

Table 1c. Weighted Baseline Characteristics of Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Propensity Score Stratified,

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	25,967	37.3%	255,647	36.8%	0.497	0.010
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	48,928	70.3%	471,272	67.8%	2.439	0.053
Everolimus	33	0.0%	177	0.0%	0.022	0.011
Nonsteroidal anti-inflammatory drugs (NSAIDs)	8,966	12.9%	88,045	12.7%	0.204	0.006
Sirolimus	21	0.0%	195	0.0%	0.001	0.001
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	18.0	14.6	17.4	19.8	0.600	0.035
Mean number of emergency room encounters	1.0	3.4	0.8	1.7	0.152	0.056
Mean number of inpatient hospital encounters	1.1	1.5	1.0	1.1	0.091	0.067
Mean number of non-acute institutional encounters	0.5	1.3	0.4	1.0	0.063	0.055
Mean number of other ambulatory encounters	13.1	20.5	12.4	17.6	0.699	0.037
<i>Mean number of filled prescriptions</i>	<i>30.6</i>	<i>20.9</i>	<i>27.0</i>	<i>23.0</i>	<i>3.589</i>	<i>0.164</i>
<i>Mean number of generics</i>	<i>12.8</i>	<i>5.5</i>	<i>11.6</i>	<i>5.7</i>	<i>1.224</i>	<i>0.218</i>
Mean number of unique drug classes	11.1	4.8	10.8	5.0	0.239	0.049

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

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Table 1d. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	49,140	100.0%	337,083	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	72.6	10.7	73.8	12.0	-1.241	-0.109
Age	Number	Percent	Number	Percent		
18-44 years	1,164	2.4%	8,502	2.5%	-0.153	-0.010
45-54 years	2,653	5.4%	18,293	5.4%	-0.028	-0.001
55-64 years	5,990	12.2%	40,547	12.0%	0.161	0.005
65+ years	39,333	80.0%	269,741	80.0%	0.021	0.001
Sex						
Female	19,226	39.1%	187,871	55.7%	-16.609	-0.337
Male	29,914	60.9%	149,212	44.3%	16.609	0.337
Race						
American Indian or Alaska Native	133	0.3%	1,948	0.6%	-0.307	-0.047
Asian	1,070	2.2%	7,811	2.3%	-0.140	-0.009
Black or African American	6,989	14.2%	55,801	16.6%	-2.331	-0.065
Native Hawaiian or Other Pacific Islander	61	0.1%	478	0.1%	-0.018	-0.005
Unknown	8,082	16.4%	47,793	14.2%	2.268	0.063
White	32,805	66.8%	223,252	66.2%	0.528	0.011
Hispanic Origin	1,135	2.3%	9,032	2.7%	-0.370	-0.024
Year						
2015	878	1.8%	32,231	9.6%	-7.775	-0.341
2016	6,685	13.6%	70,696	21.0%	-7.369	-0.196
2017	11,072	22.5%	73,800	21.9%	0.638	0.015
2018	13,611	27.7%	81,657	24.2%	3.474	0.079
2019	16,598	33.8%	77,594	23.0%	10.758	0.240
2020	296	0.60%	1,105	0.30%	0.275	0.040
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.4	2.7	5.8	3.0	-0.374	-0.133
	Number	Percent	Number	Percent		
Ambulatory allergies or allergy treatment	26,106	53.1%	169,522	50.3%	2.835	0.057
Angioedema (-183, -1)	58	0.1%	825	0.2%	-0.127	-0.030
Angioedema (ever, -1)	750	1.5%	7,357	2.2%	-0.656	-0.049
Diabetes	26,110	53.1%	173,497	51.5%	1.664	0.033
Ischemic heart disease	38,297	77.9%	203,944	60.5%	17.432	0.385
Renal disorders	21,237	43.2%	154,620	45.9%	-2.653	-0.053
Serious allergies	6,466	13.2%	54,435	16.1%	-2.991	-0.085

Table 1d. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	21,703	44.2%	134,451	39.9%	4.279	0.087
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,889	87.3%	222,859	66.1%	21.165	0.517
Everolimus	15	0.0%	98	0.0%	0.001	0.001
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,633	11.5%	44,187	13.1%	-1.645	-0.050
Sirolimus	*****	*****	142	0.0%	-0.030	-0.018
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	19.2	14.8	20.4	22.5	-1.228	-0.064
Mean number of emergency room encounters	0.6	1.3	0.8	1.7	-0.169	-0.112
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	-0.079	-0.071
Mean number of non-acute institutional encounters	0.2	0.7	0.4	1.0	-0.174	-0.192
Mean number of other ambulatory encounters	8.1	11.6	11.7	17.4	-3.639	-0.246
<i>Mean number of filled prescriptions</i>	<i>32.5</i>	<i>20.9</i>	<i>27.8</i>	<i>22.3</i>	<i>4.697</i>	<i>0.217</i>
<i>Mean number of generics</i>	<i>13.8</i>	<i>5.4</i>	<i>12.0</i>	<i>5.8</i>	<i>1.857</i>	<i>0.331</i>
<i>Mean number of unique drug classes</i>	<i>12.0</i>	<i>4.7</i>	<i>11.2</i>	<i>5.1</i>	<i>0.812</i>	<i>0.164</i>

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

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Table 1e. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	49,137	100.0%	49,137	14.6%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	72.6	10.7	72.6	11.5	-0.016	-0.001
Age	Number	Percent	Number	Percent		
18-44 years	1,164	2.4%	1,231	2.5%	-0.136	-0.009
45-54 years	2,652	5.4%	2,977	6.1%	-0.661	-0.029
55-64 years	5,988	12.2%	6,682	13.6%	-1.412	-0.043
65+ years	39,333	80.0%	38,247	77.8%	2.210	0.058
Sex						
Female	19,226	39.1%	19,287	39.3%	-0.124	-0.003
Male	29,911	60.9%	29,850	60.7%	0.124	0.003
Race						
American Indian or Alaska Native	133	0.3%	144	0.3%	-0.022	-0.004
Asian	1,070	2.2%	1,059	2.2%	0.022	0.002
Black or African American	6,988	14.2%	7,004	14.3%	-0.033	-0.001
Native Hawaiian or Other Pacific Islander	61	0.1%	53	0.1%	0.016	0.005
Unknown	8,080	16.4%	8,091	16.5%	-0.022	-0.001
White	32,805	66.8%	32,786	66.7%	0.039	0.001
Hispanic Origin	1,135	2.3%	1,221	2.5%	-0.175	-0.011
Year						
2015	878	1.8%	822	1.7%	0.114	0.009
2016	6,685	13.6%	6,735	13.7%	-0.102	-0.003
2017	11,072	22.5%	11,079	22.5%	-0.014	-0.000
2018	13,611	27.7%	13,558	27.6%	0.108	0.002
2019	16,595	33.8%	16,643	33.9%	-0.098	-0.002
2020	296	0.60%	300	0.60%	-0.008	-0.001
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.4	2.7	5.4	2.7	0.001	0.000
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	26,103	53.1%	26,126	53.2%	-0.047	-0.001
Angioedema (-183, -1)	58	0.1%	56	0.1%	0.004	0.001
Angioedema (ever, -1)	750	1.5%	1,084	2.2%	-0.680	-0.050
Diabetes	26,109	53.1%	25,978	52.9%	0.267	0.005
Ischemic heart disease	38,294	77.9%	38,161	77.7%	0.271	0.007
Renal disorders	21,235	43.2%	21,281	43.3%	-0.094	-0.002
Serious allergies	6,466	13.2%	6,500	13.2%	-0.069	-0.002

Table 1e. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	21,700	44.2%	21,734	44.2%	-0.069	-0.001
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,886	87.3%	42,937	87.4%	-0.104	-0.003
Everolimus	15	0.0%	19	0.0%	-0.008	-0.004
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,633	11.5%	5,752	11.7%	-0.242	-0.008
Sirolimus	*****	*****	*****	*****	0.004	0.004
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	19.2	14.8	19.2	19.8	-0.002	-0.000
Mean number of emergency room encounters	0.6	1.3	0.6	1.2	-0.010	-0.008
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.0	0.000	0.000
Mean number of non-acute institutional encounters	0.2	0.7	0.2	0.7	-0.002	-0.002
Mean number of other ambulatory encounters	8.1	11.6	8.1	11.0	0.006	0.001
<i>Mean number of filled prescriptions</i>	<i>32.5</i>	<i>20.9</i>	<i>29.7</i>	<i>22.4</i>	<i>2.717</i>	<i>0.125</i>
<i>Mean number of generics</i>	<i>13.8</i>	<i>5.4</i>	<i>12.9</i>	<i>5.8</i>	<i>0.967</i>	<i>0.173</i>
Mean number of unique drug classes	12.0	4.7	12.0	5.1	-0.034	-0.007

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

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Table 1f. Weighted Baseline Characteristics of Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Propensity Score Stratified,

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	49,140	100.0%	337,083	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	73.6	11.1	73.7	12.0	-0.109	-0.009
Age	Number	Percent	Number	Percent		
18-44 years	1,100	2.2%	8,414	2.5%	-0.258	-0.017
45-54 years	2,349	4.8%	18,410	5.5%	-0.682	-0.031
55-64 years	5,573	11.3%	40,943	12.1%	-0.806	-0.026
65+ years	40,119	81.6%	269,315	79.9%	1.746	0.047
Sex						
Female	26,639	54.2%	181,198	53.8%	0.456	0.009
Male	22,501	45.8%	155,885	46.2%	-0.456	-0.009
Race						
American Indian or Alaska Native	297	0.6%	1,825	0.5%	0.063	0.008
Asian	1,046	2.1%	7,748	2.3%	-0.170	-0.012
Black or African American	7,384	15.0%	55,001	16.3%	-1.289	-0.036
Native Hawaiian or Other Pacific Islander	66	0.1%	475	0.1%	-0.007	-0.002
Unknown	7,753	15.8%	47,835	14.2%	1.587	0.069
White	32,593	66.3%	224,199	66.5%	-0.184	-0.004
Hispanic Origin	1,061	2.2%	8,949	2.7%	-0.495	-0.032
Year						
2015	3,730	7.6%	28,917	8.6%	-0.988	-0.036
2016	9,534	19.4%	67,607	20.1%	-0.655	-0.016
2017	10,600	21.6%	74,244	22.0%	-0.455	-0.011
2018	12,309	25.0%	83,326	24.7%	0.329	0.008
2019	12,738	25.9%	81,807	24.3%	1.653	0.038
2020	230	0.50%	1,181	0.40%	0.118	0.018
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.7	3.0	5.7	2.9	-0.003	-0.001
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	25,269	51.4%	170,719	50.6%	0.777	0.016
Angioedema (-183, -1)	115	0.2%	770	0.2%	0.006	0.001
Angioedema (ever, -1)	775	1.6%	7,342	2.2%	-0.601	-0.044
Diabetes	24,847	50.6%	174,248	51.7%	-1.128	-0.023
Ischemic heart disease	31,038	63.2%	211,390	62.7%	0.451	0.009
Renal disorders	22,193	45.2%	153,842	45.6%	-0.477	-0.010
Serious allergies	7,717	15.7%	53,278	15.8%	-0.101	-0.003

Table 1f. Weighted Baseline Characteristics of Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Propensity Score Stratified,

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	20,111	40.9%	136,253	40.4%	0.505	0.010
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	34,636	70.5%	231,958	68.8%	1.671	0.036
Everolimus	14	0.0%	98	0.0%	-0.000	-0.000
Nonsteroidal anti-inflammatory drugs (NSAIDs)	6,349	12.9%	43,543	12.9%	0.003	0.000
Sirolimus	15	0.0%	129	0.0%	-0.007	-0.004
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	19.9	17.4	20.3	22.2	-0.439	-0.022
Mean number of emergency room encounters	0.8	2.7	0.8	1.6	0.063	0.028
Mean number of inpatient hospital encounters	0.8	1.2	0.8	1.1	0.007	0.006
Mean number of non-acute institutional encounters	0.4	1.1	0.4	1.0	0.008	0.008
Mean number of other ambulatory encounters	11.3	18.2	11.3	16.8	0.017	0.001
<i>Mean number of filled prescriptions</i>	<i>31.2</i>	<i>22.2</i>	<i>28.0</i>	<i>22.3</i>	<i>3.224</i>	<i>0.145</i>
<i>Mean number of generics</i>	<i>13.2</i>	<i>5.5</i>	<i>12.1</i>	<i>5.8</i>	<i>1.146</i>	<i>0.202</i>
Mean number of unique drug classes	11.5	4.8	11.3	5.1	0.153	0.031

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1g. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	49,629	100.0%	695,068	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	70.4	11.1	72.7	12.5	-2.309	-0.196
Age	Number	Percent	Number	Percent		
18-44 years	1,592	3.2%	21,593	3.1%	0.101	0.006
45-54 years	3,425	6.9%	45,072	6.5%	0.417	0.017
55-64 years	8,067	16.3%	97,279	14.0%	2.259	0.063
65+ years	36,545	73.6%	531,124	76.4%	-2.777	-0.064
Sex						
Female	14,886	30.0%	341,922	49.2%	-19.198	-0.400
Male	34,743	70.0%	353,146	50.8%	19.198	0.400
Race						
American Indian or Alaska Native	165	0.3%	4,526	0.7%	-0.319	-0.046
Asian	526	1.1%	7,873	1.1%	-0.073	-0.007
Black or African American	6,074	12.2%	92,135	13.3%	-1.017	-0.030
Native Hawaiian or Other Pacific Islander	46	0.1%	741	0.1%	-0.014	-0.004
Unknown	8,192	16.5%	99,667	14.3%	2.167	0.060
White	34,626	69.8%	490,126	70.5%	-0.745	-0.016
Hispanic Origin	990	2.0%	15,590	2.2%	-0.248	-0.017
Year						
2015	951	1.9%	87,092	12.5%	-10.614	-0.419
2016	6,862	13.8%	172,883	24.9%	-11.046	-0.282
2017	11,714	23.6%	156,612	22.5%	1.071	0.025
2018	13,939	28.1%	143,032	20.6%	7.508	0.176
2019	15,918	32.1%	133,697	19.2%	12.839	0.297
2020	245	0.50%	1,752	0.30%	0.242	0.040
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.1	2.6	5.8	3.0	-0.734	-0.262
	Number	Percent	Number	Percent		
Ambulatory allergies or allergy treatment	23,931	48.2%	320,785	46.2%	2.068	0.041
Angioedema (-183, -1)	46	0.1%	864	0.1%	-0.032	-0.010
Angioedema (ever, -1)	333	0.7%	7,320	1.1%	-0.382	-0.041
Diabetes	24,859	50.1%	326,119	46.9%	3.171	0.063
Ischemic heart disease	39,138	78.9%	433,124	62.3%	16.547	0.369
Renal disorders	18,823	37.9%	289,848	41.7%	-3.773	-0.077
Serious allergies	5,370	10.8%	110,996	16.0%	-5.149	-0.152

Table 1g. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	20,361	41.0%	253,046	36.4%	4.620	0.095
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,882	86.4%	458,271	65.9%	20.473	0.495
Everolimus	11	0.0%	183	0.0%	-0.004	-0.003
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,678	11.4%	88,974	12.8%	-1.360	-0.042
Sirolimus	*****	*****	208	0.0%	-0.018	-0.012
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	17.5	13.4	17.4	19.7	0.193	0.011
Mean number of emergency room encounters	0.6	1.3	0.9	1.8	-0.233	-0.149
Mean number of inpatient hospital encounters	0.7	1.0	1.0	1.2	-0.280	-0.256
Mean number of non-acute institutional encounters	0.2	0.7	0.4	1.1	-0.258	-0.289
Mean number of other ambulatory encounters	7.3	10.6	12.8	18.0	-5.565	-0.377
<i>Mean number of filled prescriptions</i>	<i>31.8</i>	<i>20.3</i>	<i>26.9</i>	<i>23.0</i>	<i>4.963</i>	<i>0.229</i>
<i>Mean number of generics</i>	<i>13.2</i>	<i>5.1</i>	<i>11.5</i>	<i>5.7</i>	<i>1.669</i>	<i>0.309</i>
Mean number of unique drug classes	11.4	4.5	10.8	5.0	0.623	0.131

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1h. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	49,628	100.0%	49,628	7.1%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	70.4	11.1	70.5	12.0	-0.018	-0.002
Age	Number	Percent	Number	Percent		
18-44 years	1,592	3.2%	1,778	3.6%	-0.375	-0.021
45-54 years	3,425	6.9%	3,879	7.8%	-0.915	-0.036
55-64 years	8,066	16.3%	8,362	16.8%	-0.596	-0.016
65+ years	36,545	73.6%	35,609	71.8%	1.886	0.045
Sex						
Female	14,886	30.0%	15,194	30.6%	-0.621	-0.014
Male	34,742	70.0%	34,434	69.4%	0.621	0.014
Race						
American Indian or Alaska Native	165	0.3%	157	0.3%	0.016	0.003
Asian	526	1.1%	498	1.0%	0.056	0.006
Black or African American	6,073	12.2%	6,128	12.3%	-0.111	-0.003
Native Hawaiian or Other Pacific Islander	46	0.1%	60	0.1%	-0.028	-0.009
Unknown	8,192	16.5%	8,156	16.4%	0.073	0.003
White	34,626	69.8%	34,629	69.8%	-0.006	-0.000
Hispanic Origin	990	2.0%	1,109	2.2%	-0.240	-0.017
Year						
2015	951	1.9%	895	1.8%	0.113	0.008
2016	6,862	13.8%	6,855	13.8%	0.014	0.000
2017	11,714	23.6%	11,709	23.6%	0.010	0.000
2018	13,939	28.1%	14,045	28.3%	-0.214	-0.005
2019	15,917	32.1%	15,886	32.0%	0.062	0.001
2020	245	0.50%	238	0.50%	0.014	0.002
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.1	2.6	5.1	2.6	-0.008	-0.003
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	23,930	48.2%	23,912	48.2%	0.036	0.001
Angioedema (-183, -1)	46	0.1%	54	0.1%	-0.016	-0.005
Angioedema (ever, -1)	333	0.7%	539	1.1%	-0.415	-0.044
Diabetes	24,858	50.1%	24,757	49.9%	0.204	0.004
Ischemic heart disease	39,137	78.9%	39,128	78.8%	0.018	0.000
Renal disorders	18,823	37.9%	18,881	38.0%	-0.117	-0.002
Serious allergies	5,370	10.8%	5,418	10.9%	-0.097	-0.003

Table 1h. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedemain the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	20,360	41.0%	20,491	41.3%	-0.264	-0.005
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,881	86.4%	43,054	86.8%	-0.349	-0.010
Everolimus	11	0.0%	14	0.0%	-0.006	-0.004
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,678	11.4%	5,746	11.6%	-0.137	-0.004
Sirolimus	*****	*****	*****	*****	-0.002	-0.002
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	17.5	13.4	17.6	20.0	-0.048	-0.003
Mean number of emergency room encounters	0.6	1.3	0.6	1.1	-0.007	-0.006
Mean number of inpatient hospital encounters	0.7	1.0	0.7	0.9	-0.004	-0.004
Mean number of non-acute institutional encounters	0.2	0.7	0.2	0.7	-0.003	-0.005
Mean number of other ambulatory encounters	7.3	10.6	7.3	9.7	-0.004	-0.000
<i>Mean number of filled prescriptions</i>	<i>31.8</i>	<i>20.3</i>	<i>28.0</i>	<i>22.5</i>	<i>3.788</i>	<i>0.177</i>
<i>Mean number of generics</i>	<i>13.2</i>	<i>5.1</i>	<i>12.2</i>	<i>5.6</i>	<i>1.029</i>	<i>0.192</i>
Mean number of unique drug classes	11.4	4.5	11.4	5.0	-0.002	-0.000

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1i. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	35,703	100.0%	337,204	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	72.8	10.6	73.8	12.0	-1.042	-0.092
Age	Number	Percent	Number	Percent		
18-44 years	774	2.2%	8,505	2.5%	-0.354	-0.023
45-54 years	1,794	5.0%	18,304	5.4%	-0.403	-0.018
55-64 years	4,275	12.0%	40,567	12.0%	-0.057	-0.002
65+ years	28,860	80.8%	269,828	80.0%	0.814	0.021
Sex						
Female	13,901	38.9%	187,925	55.7%	-16.795	-0.341
Male	21,802	61.1%	149,279	44.3%	16.795	0.341
Race						
American Indian or Alaska Native	86	0.2%	1,948	0.6%	-0.337	-0.053
Asian	863	2.4%	7,814	2.3%	0.100	0.007
Black or African American	4,832	13.5%	55,825	16.6%	-3.021	-0.085
Native Hawaiian or Other Pacific Islander	46	0.1%	478	0.1%	-0.013	-0.004
Unknown	5,777	16.2%	47,811	14.2%	2.002	0.056
White	24,099	67.5%	223,328	66.2%	1.269	0.027
Hispanic Origin	887	2.5%	9,034	2.7%	-0.195	-0.012
Year						
2015	615	1.7%	32,231	9.6%	-7.836	-0.345
2016	4,471	12.5%	70,701	21.0%	-8.444	-0.228
2017	7,825	21.9%	73,818	21.9%	0.026	0.001
2018	10,142	28.4%	81,689	24.2%	4.181	0.095
2019	12,431	34.8%	77,659	23.0%	11.788	0.262
2020	219	0.60%	1,106	0.30%	0.285	0.042
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.3	2.6	5.8	3.0	-0.460	-0.165
	Number	Percent	Number	Percent		
Ambulatory allergies or allergy treatment	19,158	53.7%	169,574	50.3%	3.371	0.068
Angioedema (-183, -1)	35	0.1%	825	0.2%	-0.147	-0.035
Angioedema (ever, -1)	541	1.5%	7,359	2.2%	-0.667	-0.050
Diabetes	19,018	53.3%	173,568	51.5%	1.795	0.036
Ischemic heart disease	27,797	77.9%	204,033	60.5%	17.349	0.383
Renal disorders	14,977	41.9%	154,691	45.9%	-3.926	-0.079
Serious allergies	4,472	12.5%	54,454	16.1%	-3.623	-0.104

Table 1i. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	16,113	45.1%	134,493	39.9%	5.246	0.106
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	31,138	87.2%	222,966	66.1%	21.092	0.515
Everolimus	*****	*****	98	0.0%	-0.001	-0.001
Nonsteroidal anti-inflammatory drugs (NSAIDs)	4,177	11.7%	44,193	13.1%	-1.406	-0.043
Sirolimus	*****	*****	142	0.0%	-0.028	-0.017
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	19.0	14.7	20.4	22.5	-1.447	-0.076
Mean number of emergency room encounters	0.6	1.3	0.8	1.7	-0.200	-0.134
Mean number of inpatient hospital encounters	0.7	1.0	0.8	1.1	-0.130	-0.120
Mean number of non-acute institutional encounters	0.2	0.7	0.4	1.0	-0.211	-0.241
Mean number of other ambulatory encounters	7.4	10.4	11.7	17.4	-4.289	-0.299
<i>Mean number of filled prescriptions</i>	33.3	21.7	27.8	22.3	5.583	0.254
<i>Mean number of generics</i>	14.0	5.4	12.0	5.8	2.009	0.358
Mean number of unique drug classes	12.1	4.8	11.2	5.1	0.886	0.179

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

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Table 1j. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	35,702	100.0%	35,702	10.6%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	72.8	10.6	72.8	11.4	-0.050	-0.005
Age	Number	Percent	Number	Percent		
18-44 years	774	2.2%	796	2.2%	-0.062	-0.004
45-54 years	1,794	5.0%	2,104	5.9%	-0.868	-0.039
55-64 years	4,275	12.0%	4,789	13.4%	-1.440	-0.045
65+ years	28,859	80.8%	28,013	78.5%	2.370	0.063
Sex						
Female	13,901	38.9%	14,074	39.4%	-0.485	-0.010
Male	21,801	61.1%	21,628	60.6%	0.485	0.010
Race						
American Indian or Alaska Native	86	0.2%	85	0.2%	0.003	0.001
Asian	862	2.4%	886	2.5%	-0.067	-0.004
Black or African American	4,832	13.5%	4,869	13.6%	-0.104	-0.003
Native Hawaiian or Other Pacific Islander	46	0.1%	43	0.1%	0.008	0.002
Unknown	5,777	16.2%	5,754	16.1%	0.064	0.003
White	24,099	67.5%	24,065	67.4%	0.095	0.002
Hispanic Origin	887	2.5%	899	2.5%	-0.034	-0.002
Year						
2015	615	1.7%	586	1.6%	0.081	0.006
2016	4,471	12.5%	4,444	12.4%	0.076	0.002
2017	7,824	21.9%	7,801	21.9%	0.064	0.002
2018	10,142	28.4%	10,242	28.7%	-0.280	-0.006
2019	12,431	34.8%	12,429	34.8%	0.006	0.000
2020	219	0.60%	200	0.60%	0.053	0.007
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.3	2.6	5.3	2.6	0.016	0.006
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	19,157	53.7%	18,976	53.2%	0.507	0.010
Angioedema (-183, -1)	35	0.1%	38	0.1%	-0.008	-0.003
Angioedema (ever, -1)	541	1.5%	731	2.0%	-0.532	-0.040
Diabetes	19,017	53.3%	19,134	53.6%	-0.328	-0.007
Ischemic heart disease	27,796	77.9%	27,790	77.8%	0.017	0.000
Renal disorders	14,977	42.0%	14,929	41.8%	0.134	0.003
Serious allergies	4,472	12.5%	4,463	12.5%	0.025	0.001

Table 1j. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ARBs		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	16,112	45.1%	16,023	44.9%	0.249	0.005
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	31,137	87.2%	31,197	87.4%	-0.168	-0.005
Everolimus	*****	*****	*****	*****	0.003	0.002
Nonsteroidal anti-inflammatory drugs (NSAIDs)	4,177	11.7%	4,171	11.7%	0.017	0.001
Sirolimus	*****	*****	*****	*****	-0.008	-0.006
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	19.0	14.7	18.8	19.1	0.195	0.011
Mean number of emergency room encounters	0.6	1.3	0.6	1.1	-0.008	-0.007
Mean number of inpatient hospital encounters	0.7	1.0	0.7	1.0	0.003	0.003
Mean number of non-acute institutional encounters	0.2	0.7	0.2	0.7	-0.002	-0.003
Mean number of other ambulatory encounters	7.4	10.4	7.4	10.0	0.032	0.003
<i>Mean number of filled prescriptions</i>	<i>33.3</i>	<i>21.7</i>	<i>30.0</i>	<i>22.9</i>	<i>3.305</i>	<i>0.148</i>
<i>Mean number of generics</i>	<i>14.0</i>	<i>5.4</i>	<i>12.9</i>	<i>5.8</i>	<i>1.078</i>	<i>0.192</i>
Mean number of unique drug classes	12.1	4.7	12.1	5.1	-0.007	-0.001

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1k. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	69,639	100.0%	694,882	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	70.2	11.2	72.7	12.5	-2.563	-0.216
Age	Number	Percent	Number	Percent		
18-44 years	2,412	3.5%	21,587	3.1%	0.357	0.020
45-54 years	5,115	7.3%	45,057	6.5%	0.861	0.034
55-64 years	11,494	16.5%	97,244	14.0%	2.511	0.070
65+ years	50,618	72.7%	530,994	76.4%	-3.729	-0.086
Sex						
Female	21,199	30.4%	341,867	49.2%	-18.757	-0.390
Male	48,440	69.6%	353,015	50.8%	18.757	0.390
Race						
American Indian or Alaska Native	242	0.3%	4,525	0.7%	-0.304	-0.043
Asian	666	1.0%	7,871	1.1%	-0.176	-0.017
Black or African American	9,015	12.9%	92,098	13.3%	-0.308	-0.009
Native Hawaiian or Other Pacific Islander	66	0.1%	741	0.1%	-0.012	-0.004
Unknown	11,656	16.7%	99,645	14.3%	2.398	0.066
White	47,994	68.9%	490,002	70.5%	-1.598	-0.035
Hispanic Origin	1,351	1.9%	15,586	2.2%	-0.303	-0.021
Year						
2015	1,349	1.9%	87,092	12.5%	-10.596	-0.418
2016	10,510	15.1%	172,880	24.9%	-9.787	-0.247
2017	16,864	24.2%	156,573	22.5%	1.684	0.040
2018	19,077	27.4%	142,979	20.6%	6.818	0.160
2019	21,511	30.9%	133,608	19.2%	11.662	0.272
2020	328	0.50%	1,750	0.30%	0.219	0.037
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.2	2.7	5.8	3.0	-0.610	-0.214
	Number	Percent	Number	Percent		
Ambulatory allergies or allergy treatment	33,754	48.5%	320,699	46.2%	2.318	0.046
Angioedema (-183, -1)	83	0.1%	864	0.1%	-0.005	-0.001
Angioedema (ever, -1)	494	0.7%	7,317	1.1%	-0.344	-0.037
Diabetes	35,071	50.4%	326,005	46.9%	3.446	0.069
Ischemic heart disease	55,067	79.1%	432,968	62.3%	16.767	0.375
Renal disorders	27,364	39.3%	289,746	41.7%	-2.403	-0.049
Serious allergies	8,047	11.6%	110,960	16.0%	-4.413	-0.128

Table 1k. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	28,444	40.8%	252,983	36.4%	4.438	0.091
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	60,338	86.6%	458,102	65.9%	20.719	0.502
Everolimus	11	0.0%	183	0.0%	-0.011	-0.007
Nonsteroidal anti-inflammatory drugs (NSAIDs)	7,793	11.2%	88,957	12.8%	-1.611	-0.050
Sirolimus	*****	*****	208	0.0%	-0.018	-0.013
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	17.9	13.7	17.4	19.7	0.531	0.031
Mean number of emergency room encounters	0.7	1.4	0.9	1.8	-0.188	-0.115
Mean number of inpatient hospital encounters	0.8	1.1	1.0	1.2	-0.211	-0.186
Mean number of non-acute institutional encounters	0.2	0.8	0.4	1.1	-0.217	-0.235
Mean number of other ambulatory encounters	8.1	12.2	12.8	18.0	-4.732	-0.308
<i>Mean number of filled prescriptions</i>	<i>31.3</i>	<i>19.8</i>	<i>26.9</i>	<i>23.0</i>	<i>4.408</i>	<i>0.205</i>
<i>Mean number of generics</i>	<i>13.1</i>	<i>5.1</i>	<i>11.5</i>	<i>5.7</i>	<i>1.614</i>	<i>0.297</i>
Mean number of unique drug classes	11.4	4.5	10.8	5.0	0.626	0.131

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 11. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	69,639	100.0%	69,639	10.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	70.2	11.2	70.2	12.2	-0.019	-0.002
Age	Number	Percent	Number	Percent		
18-44 years	2,412	3.5%	2,717	3.9%	-0.438	-0.024
45-54 years	5,115	7.3%	5,694	8.2%	-0.831	-0.032
55-64 years	11,494	16.5%	11,900	17.1%	-0.583	-0.016
65+ years	50,618	72.7%	49,328	70.8%	1.852	0.044
Sex						
Female	21,199	30.4%	21,398	30.7%	-0.286	-0.006
Male	48,440	69.6%	48,241	69.3%	0.286	0.006
Race						
American Indian or Alaska Native	242	0.3%	242	0.3%	0.000	0.000
Asian	666	1.0%	662	1.0%	0.006	0.001
Black or African American	9,015	12.9%	9,043	13.0%	-0.040	-0.001
Native Hawaiian or Other Pacific Islander	66	0.1%	75	0.1%	-0.013	-0.004
Unknown	11,656	16.7%	11,662	16.7%	-0.009	-0.000
White	47,994	68.9%	47,955	68.9%	0.056	0.001
Hispanic Origin	1,351	1.9%	1,521	2.2%	-0.244	-0.017
Year						
2015	1,349	1.9%	1,255	1.8%	0.135	0.010
2016	10,510	15.1%	10,469	15.0%	0.059	0.002
2017	16,864	24.2%	16,928	24.3%	-0.092	-0.002
2018	19,077	27.4%	19,069	27.4%	0.011	0.000
2019	21,511	30.9%	21,555	31.0%	-0.063	-0.001
2020	328	0.50%	363	0.50%	-0.050	-0.007
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.2	2.7	5.2	2.6	-0.017	-0.006
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	33,754	48.5%	33,596	48.2%	0.227	0.005
Angioedema (-183, -1)	83	0.1%	92	0.1%	-0.013	-0.004
Angioedema (ever, -1)	494	0.7%	723	1.0%	-0.329	-0.035
Diabetes	35,071	50.4%	34,906	50.1%	0.237	0.005
Ischemic heart disease	55,067	79.1%	55,153	79.2%	-0.123	-0.003
Renal disorders	27,364	39.3%	27,495	39.5%	-0.188	-0.004
Serious allergies	8,047	11.6%	8,038	11.5%	0.013	0.000

Table 1I. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	28,444	40.8%	28,475	40.9%	-0.045	-0.001
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	60,338	86.6%	60,422	86.8%	-0.121	-0.004
Everolimus	11	0.0%	12	0.0%	-0.001	-0.001
Nonsteroidal anti-inflammatory drugs (NSAIDs)	7,793	11.2%	7,766	11.2%	0.039	0.001
Sirolimus	*****	*****	14	0.0%	-0.009	-0.007
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	17.9	13.7	17.9	20.5	-0.041	-0.002
Mean number of emergency room encounters	0.7	1.4	0.7	1.2	-0.003	-0.002
Mean number of inpatient hospital encounters	0.8	1.1	0.8	0.9	-0.011	-0.010
Mean number of non-acute institutional encounters	0.2	0.8	0.2	0.7	-0.006	-0.008
Mean number of other ambulatory encounters	8.1	12.2	8.2	11.0	-0.062	-0.005
<i>Mean number of filled prescriptions</i>	<i>31.3</i>	<i>19.8</i>	<i>28.2</i>	<i>22.9</i>	<i>3.118</i>	<i>0.146</i>
<i>Mean number of generics</i>	<i>13.1</i>	<i>5.1</i>	<i>12.2</i>	<i>5.7</i>	<i>0.922</i>	<i>0.170</i>
Mean number of unique drug classes	11.4	4.5	11.4	5.0	-0.041	-0.009

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 1m. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	49,140	100.0%	337,083	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	72.6	10.7	73.8	12.0	-1.241	-0.109
Age	Number	Percent	Number	Percent		
18-44 years	1,164	2.4%	8,502	2.5%	-0.153	-0.010
45-54 years	2,653	5.4%	18,293	5.4%	-0.028	-0.001
55-64 years	5,990	12.2%	40,547	12.0%	0.161	0.005
65+ years	39,333	80.0%	269,741	80.0%	0.021	0.001
Sex						
Female	19,226	39.1%	187,871	55.7%	-16.609	-0.337
Male	29,914	60.9%	149,212	44.3%	16.609	0.337
Race						
American Indian or Alaska Native	133	0.3%	1,948	0.6%	-0.307	-0.047
Asian	1,070	2.2%	7,811	2.3%	-0.140	-0.009
Black or African American	6,989	14.2%	55,801	16.6%	-2.331	-0.065
Native Hawaiian or Other Pacific Islander	61	0.1%	478	0.1%	-0.018	-0.005
Unknown	8,082	16.4%	47,793	14.2%	2.268	0.063
White	32,805	66.8%	223,252	66.2%	0.528	0.011
Hispanic Origin	1,135	2.3%	9,032	2.7%	-0.370	-0.024
Year						
2015	878	1.8%	32,231	9.6%	-7.775	-0.341
2016	6,685	13.6%	70,696	21.0%	-7.369	-0.196
2017	11,072	22.5%	73,800	21.9%	0.638	0.015
2018	13,611	27.7%	81,657	24.2%	3.474	0.079
2019	16,598	33.8%	77,594	23.0%	10.758	0.240
2020	296	0.60%	1,105	0.30%	0.275	0.040
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.4	2.7	5.8	3.0	-0.374	-0.133
	Number	Percent	Number	Percent		
Ambulatory allergies or allergy treatment	26,106	53.1%	169,522	50.3%	2.835	0.057
Angioedema (-183, -1)	58	0.1%	825	0.2%	-0.127	-0.030
Angioedema (ever, -1)	750	1.5%	7,357	2.2%	-0.656	-0.049
Diabetes	26,110	53.1%	173,497	51.5%	1.664	0.033
Ischemic heart disease	38,297	77.9%	203,944	60.5%	17.432	0.385
Renal disorders	21,237	43.2%	154,620	45.9%	-2.653	-0.053
Serious allergies	6,466	13.2%	54,435	16.1%	-2.991	-0.085

Table 1m. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated)

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	21,703	44.2%	134,451	39.9%	4.279	0.087
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,889	87.3%	222,859	66.1%	21.165	0.517
Everolimus	15	0.0%	98	0.0%	0.001	0.001
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,633	11.5%	44,187	13.1%	-1.645	-0.050
Sirolimus	*****	*****	142	0.0%	-0.030	-0.018
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	19.2	14.8	20.4	22.5	-1.228	-0.064
Mean number of emergency room encounters	0.6	1.3	0.8	1.7	-0.169	-0.112
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	-0.079	-0.071
Mean number of non-acute institutional encounters	0.2	0.7	0.4	1.0	-0.174	-0.192
Mean number of other ambulatory encounters	8.1	11.6	11.7	17.4	-3.639	-0.246
<i>Mean number of filled prescriptions</i>	<i>32.5</i>	<i>20.9</i>	<i>27.8</i>	<i>22.3</i>	<i>4.697</i>	<i>0.217</i>
<i>Mean number of generics</i>	<i>13.8</i>	<i>5.4</i>	<i>12.0</i>	<i>5.8</i>	<i>1.857</i>	<i>0.331</i>
Mean number of unique drug classes	12.0	4.7	11.2	5.1	0.812	0.164

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

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Table 1n. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	49,137	100.0%	49,137	14.6%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	72.6	10.7	72.6	11.5	-0.016	-0.001
Age	Number	Percent	Number	Percent		
18-44 years	1,164	2.4%	1,231	2.5%	-0.136	-0.009
45-54 years	2,652	5.4%	2,977	6.1%	-0.661	-0.029
55-64 years	5,988	12.2%	6,682	13.6%	-1.412	-0.043
65+ years	39,333	80.0%	38,247	77.8%	2.210	0.058
Sex						
Female	19,226	39.1%	19,287	39.3%	-0.124	-0.003
Male	29,911	60.9%	29,850	60.7%	0.124	0.003
Race						
American Indian or Alaska Native	133	0.3%	144	0.3%	-0.022	-0.004
Asian	1,070	2.2%	1,059	2.2%	0.022	0.002
Black or African American	6,988	14.2%	7,004	14.3%	-0.033	-0.001
Native Hawaiian or Other Pacific Islander	61	0.1%	53	0.1%	0.016	0.005
Unknown	8,080	16.4%	8,091	16.5%	-0.022	-0.001
White	32,805	66.8%	32,786	66.7%	0.039	0.001
Hispanic Origin	1,135	2.3%	1,221	2.5%	-0.175	-0.011
Year						
2015	878	1.8%	822	1.7%	0.114	0.009
2016	6,685	13.6%	6,735	13.7%	-0.102	-0.003
2017	11,072	22.5%	11,079	22.5%	-0.014	-0.000
2018	13,611	27.7%	13,558	27.6%	0.108	0.002
2019	16,595	33.8%	16,643	33.9%	-0.098	-0.002
2020	296	0.60%	300	0.60%	-0.008	-0.001
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.4	2.7	5.4	2.7	0.001	0.000
	Number	Percent	Number	Percent		
<i>Ambulatory allergies or allergy treatment</i>	26,103	53.1%	26,126	53.2%	-0.047	-0.001
Angioedema (-183, -1)	58	0.1%	56	0.1%	0.004	0.001
Angioedema (ever, -1)	750	1.5%	1,084	2.2%	-0.680	-0.050
Diabetes	26,109	53.1%	25,978	52.9%	0.267	0.005
Ischemic heart disease	38,294	77.9%	38,161	77.7%	0.271	0.007
Renal disorders	21,235	43.2%	21,281	43.3%	-0.094	-0.002
Serious allergies	6,466	13.2%	6,500	13.2%	-0.069	-0.002

Table 1n. Cohort of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Adjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	SV		ACEI		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Ambulatory allergies or treatment and not serious allergies	21,700	44.2%	21,734	44.2%	-0.069	-0.001
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,886	87.3%	42,937	87.4%	-0.104	-0.003
Everolimus	15	0.0%	19	0.0%	-0.008	-0.004
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,633	11.5%	5,752	11.7%	-0.242	-0.008
Sirolimus	*****	*****	*****	*****	0.004	0.004
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	19.2	14.8	19.2	19.8	-0.002	-0.000
Mean number of emergency room encounters	0.6	1.3	0.6	1.2	-0.010	-0.008
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.0	0.000	0.000
Mean number of non-acute institutional encounters	0.2	0.7	0.2	0.7	-0.002	-0.002
Mean number of other ambulatory encounters	8.1	11.6	8.1	11.0	0.006	0.001
<i>Mean number of filled prescriptions</i>	<i>32.5</i>	<i>20.9</i>	<i>29.7</i>	<i>22.4</i>	<i>2.717</i>	<i>0.125</i>
<i>Mean number of generics</i>	<i>13.8</i>	<i>5.4</i>	<i>12.9</i>	<i>5.8</i>	<i>0.967</i>	<i>0.173</i>
Mean number of unique drug classes	12.0	4.7	12.0	5.1	-0.034	-0.007

¹Covariates in italics were not included in the propensity score logistic regression model

²Covariates in blue show a standardized difference greater than 0.1

³The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne 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)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 2. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	2.14	*****	-4.6	*****	0.30 (0.23, 0.40)	<0.001
ACEI (14-day gap)	694,882	*****	*****	*****	*****	6.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	2.65	*****	-7.22	*****	0.27 (0.19, 0.39)	<0.001
ACEI (14-day gap)	69,639	*****	*****	*****	*****	9.87	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	2.14	*****	-4.33	*****	0.31 (0.23, 0.43)	<0.001
ACEI (14-day gap)	69,639	*****	*****	*****	*****	6.47	*****				
Propensity Score Adjusted Stratified Analysis; Percentiles= 10¹											
SV (14-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	2.14	*****	-4.6	*****	0.32 (0.24, 0.42)	<0.001
ACEI (14-day gap)	694,882	*****	*****	*****	*****	6.74	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 3. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval)	Wald P-Value
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	2.14	*****	-4.6	*****	0.30 (0.23, 0.40)	<0.001
ACEI (183-day prior, 14-day gap)	694,882	*****	*****	*****	*****	6.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	2.65	*****	-7.22	*****	0.27 (0.19, 0.39)	<0.001
ACEI (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	9.87	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	2.14	*****	-4.33	*****	0.31 (0.23, 0.43)	<0.001
ACEI (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	6.47	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	3.49	*****	-11.86	*****	0.22 (0.14, 0.36)	<0.001
ACEI (183-day prior, 14-day gap)	694,882	*****	*****	*****	*****	15.35	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	3.61	*****	-15.66	*****	0.19 (0.11, 0.31)	<0.001
ACEI (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	19.27	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	3.49	*****	-14.63	*****	0.19 (0.12, 0.32)	<0.001
ACEI (183-day prior, 14-day gap)	69,639	*****	*****	*****	*****	18.12	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	55,796	*****	*****	*****	*****	3.17	*****	-2.88	*****	0.53 (0.29, 0.94)	0.029
ACEI (183-day prior, 14-day gap)	638,366	*****	*****	*****	*****	6.05	*****				

Table 3. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval)	Wald P-Value
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-daygap)	51,126	*****	*****	*****	*****	3.59	*****	-1.3	*****	0.73 (0.34, 1.60)	0.435
ACEI (183-day prior, 14-daygap)	51,126	*****	*****	*****	*****	4.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-daygap)	55,796	*****	*****	*****	*****	3.17	*****	-2.13	*****	0.59 (0.30, 1.18)	0.137
ACEI (183-day prior, 14-daygap)	63,837	*****	*****	*****	*****	5.3	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-daygap)	37,655	*****	*****	*****	*****	2.5	*****	-3.29	*****	0.43 (0.20, 0.92)	0.029
ACEI (183-day prior, 14-daygap)	462,969	*****	*****	*****	*****	5.78	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-daygap)	25,679	*****	*****	*****	*****	2.23	*****	-3.35	*****	0.40 (0.13, 1.28)	0.121
ACEI (183-day prior, 14-daygap)	25,679	*****	*****	*****	*****	5.58	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-daygap)	37,655	*****	*****	*****	*****	2.5	*****	-3.02	*****	0.45 (0.19, 1.07)	0.07
ACEI (183-day prior, 14-daygap)	47,340	*****	*****	*****	*****	5.52	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-daygap)	30,271	*****	*****	*****	*****	0.52	*****	-3.87	*****	0.12 (0.04, 0.37)	<0.001
ACEI (183-day prior, 14-daygap)	397,712	*****	*****	*****	*****	4.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-daygap)	17,788	*****	*****	*****	*****	0.4	*****	-3.98	*****	0.09 (0.01, 0.70)	0.022
ACEI (183-day prior, 14-daygap)	17,788	*****	*****	*****	*****	4.37	*****				

Table 3. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval)	Wald P-Value
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-daygap)	30,271	*****	*****	*****	*****	0.52	*****	-2.91	*****	0.15 (0.05, 0.49)	0.002
ACEI (183-day prior, 14-daygap)	40,739	*****	*****	*****	*****	3.43	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-daygap)	18,853	*****	*****	*****	*****	1.81	*****	-2.31	*****	0.44 (0.21, 0.93)	0.033
ACEI (183-day prior, 14-daygap)	235,524	*****	*****	*****	*****	4.12	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-daygap)	6,391	*****	*****	*****	*****	1.87	*****	-1.87	*****	0.50 (0.09, 2.73)	0.423
ACEI (183-day prior, 14-daygap)	6,391	*****	*****	*****	*****	3.73	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-daygap)	18,853	*****	*****	*****	*****	1.81	*****	-1.18	*****	0.60 (0.24, 1.49)	0.272
ACEI (183-day prior, 14-daygap)	23,569	*****	*****	*****	*****	2.99	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-daygap)	13,182	*****	*****	*****	*****	1.72	*****	-1.83	*****	0.48 (0.19, 1.16)	0.104
ACEI (183-day prior, 14-daygap)	164,756	*****	*****	*****	*****	3.54	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-daygap)	3,020	*****	*****	*****	*****	1.78	*****	-1.78	*****	0.50 (0.05, 5.51)	0.571
ACEI (183-day prior, 14-daygap)	3,020	*****	*****	*****	*****	3.55	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-daygap)	13,182	*****	*****	*****	*****	1.72	*****	0.25	*****	1.16 (0.33, 3.99)	0.82
ACEI (183-day prior, 14-daygap)	15,799	*****	*****	*****	*****	1.47	*****				

¹Conditional analysis accounts for informative events and person-time.

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Table 4. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (-183,-1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	69,556	*****	*****	*****	*****	2.06	*****	-4.42	*****	0.30 (0.23, 0.40)	<0.001
ACEI (14-day gap)	694,018	*****	*****	*****	*****	6.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05 ¹											
SV (14-day gap, history of ACEI (-183, -1))	69,556	*****	*****	*****	*****	2.51	*****	-6.87	*****	0.27 (0.18, 0.39)	<0.001
ACEI (14-day gap)	69,556	*****	*****	*****	*****	9.38	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	69,556	*****	*****	*****	*****	2.06	*****	-4.14	*****	0.32 (0.23, 0.43)	<0.001
ACEI (14-day gap)	69,556	*****	*****	*****	*****	6.2	*****				
Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	83	*****	*****	*****	*****	72.23	*****	-195.97	*****	0.28 (0.07, 1.13)	0.074
ACEI (14-day gap)	864	*****	*****	*****	*****	268.2	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05 ¹											
SV (14-day gap, history of ACEI (-183, -1))	68	*****	*****	*****	*****	204.5	*****	-511.25	*****	0.29 (0.06, 1.38)	0.118
ACEI (14-day gap)	68	*****	*****	*****	*****	715.75	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	68	*****	*****	*****	*****	90.13	*****	-293.22	*****	0.30 (0.06, 1.44)	0.131
ACEI (14-day gap)	68	*****	*****	*****	*****	383.35	*****				

¹Conditional analysis accounts for informative events and person-time.

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Table 5. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183,-1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
No Angioedema (-183, -1)											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	2.06	*****	-4.42	*****	0.30 (0.23, 0.40)	<0.001
ACEI (183-day prior, 14-day gap)	694,018	*****	*****	*****	*****	6.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	2.51	*****	-6.87	*****	0.27 (0.18, 0.39)	<0.001
ACEI (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	9.38	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	2.06	*****	-4.14	*****	0.32 (0.23, 0.43)	<0.001
ACEI (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	6.2	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	3.3	*****	-11.18	*****	0.22 (0.14, 0.36)	<0.001
ACEI (183-day prior, 14-day gap)	694,018	*****	*****	*****	*****	14.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	3.42	*****	-14.47	*****	0.19 (0.11, 0.32)	<0.001
ACEI (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	17.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	3.3	*****	-13.57	*****	0.19 (0.12, 0.33)	<0.001
ACEI (183-day prior, 14-day gap)	69,556	*****	*****	*****	*****	16.87	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	55,726	*****	*****	*****	*****	2.91	*****	-2.83	*****	0.51 (0.28, 0.93)	0.028
ACEI (183-day prior, 14-day gap)	637,620	*****	*****	*****	*****	5.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	51,069	*****	*****	*****	*****	3.26	*****	-1.63	*****	0.67 (0.30, 1.48)	0.321
ACEI (183-day prior, 14-day gap)	51,069	*****	*****	*****	*****	4.89	*****				

Table 5. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183,-1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	55,726	*****	*****	*****	*****	2.91	*****	-2.18	*****	0.57 (0.28, 1.16)	0.12
ACEI (183-day prior, 14-day gap)	63,770	*****	*****	*****	*****	5.08	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	37,612	*****	*****	*****	*****	2.5	*****	-3.15	*****	0.44 (0.21, 0.94)	0.034
ACEI (183-day prior, 14-day gap)	462,481	*****	*****	*****	*****	5.65	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	25,660	*****	*****	*****	*****	2.23	*****	-3.35	*****	0.40 (0.13, 1.28)	0.121
ACEI (183-day prior, 14-day gap)	25,660	*****	*****	*****	*****	5.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	37,612	*****	*****	*****	*****	2.5	*****	-3.02	*****	0.45 (0.19, 1.07)	0.07
ACEI (183-day prior, 14-day gap)	47,301	*****	*****	*****	*****	5.52	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	30,241	*****	*****	*****	*****	0.52	*****	-3.8	*****	0.12 (0.04, 0.38)	<0.001
ACEI (183-day prior, 14-day gap)	397,313	*****	*****	*****	*****	4.33	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	17,775	*****	*****	*****	*****	0.4	*****	-3.98	*****	0.09 (0.01, 0.70)	0.022
ACEI (183-day prior, 14-day gap)	17,775	*****	*****	*****	*****	4.38	*****				

Table 5. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183,-1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	30,241	*****	*****	*****	*****	0.52	*****	-2.91	*****	0.15 (0.05, 0.49)	0.002
ACEI (183-day prior, 14-day gap)	40,704	*****	*****	*****	*****	3.43	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	18,831	*****	*****	*****	*****	1.81	*****	-2.27	*****	0.44 (0.21, 0.94)	0.035
ACEI (183-day prior, 14-day gap)	235,324	*****	*****	*****	*****	4.08	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	6,379	*****	*****	*****	*****	1.87	*****	-1.87	*****	0.50 (0.09, 2.73)	0.423
ACEI (183-day prior, 14-day gap)	6,379	*****	*****	*****	*****	3.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	18,831	*****	*****	*****	*****	1.81	*****	-1.18	*****	0.60 (0.24, 1.49)	0.272
ACEI (183-day prior, 14-day gap)	23,552	*****	*****	*****	*****	2.99	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	13,165	*****	*****	*****	*****	1.72	*****	-1.75	*****	0.49 (0.20, 1.19)	0.115
ACEI (183-day prior, 14-day gap)	164,613	*****	*****	*****	*****	3.47	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	3,013	*****	*****	*****	*****	1.78	*****	-1.78	*****	0.50 (0.05, 5.51)	0.571
ACEI (183-day prior, 14-day gap)	3,013	*****	*****	*****	*****	3.55	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	13,165	*****	*****	*****	*****	1.72	*****	0.25	*****	1.15 (0.33, 3.99)	0.82
ACEI (183-day prior, 14-day gap)	15,786	*****	*****	*****	*****	1.47	*****				

Table 5. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183,-1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Angioedema (-183, -1)											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	83	*****	*****	*****	*****	72.23	*****	-195.97	*****	0.28 (0.07, 1.13)	0.074
ACEI (183-day prior, 14-day gap)	864	*****	*****	*****	*****	268.2	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	68	*****	*****	*****	*****	204.5	*****	-511.25	*****	0.29 (0.06, 1.38)	0.118
ACEI (183-day prior, 14-day gap)	68	*****	*****	*****	*****	715.75	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	68	*****	*****	*****	*****	90.13	*****	-293.22	*****	0.30 (0.06, 1.44)	0.131
ACEI (183-day prior, 14-day gap)	68	*****	*****	*****	*****	383.35	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	83	*****	*****	*****	*****	158.98	*****	-582.21	*****	0.21 (0.03, 1.49)	0.118
ACEI (183-day prior, 14-day gap)	864	*****	*****	*****	*****	741.19	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	68	*****	*****	*****	*****	203.25	*****	-1016.26	*****	0.17 (0.02, 1.38)	0.097
ACEI (183-day prior, 14-day gap)	68	*****	*****	*****	*****	1,219.51	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	68	*****	*****	*****	*****	191.94	*****	-940.14	*****	0.17 (0.02, 1.42)	0.102
ACEI (183-day prior, 14-day gap)	68	*****	*****	*****	*****	1,132.08	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	70	*****	*****	*****	*****	215.98	*****	-60.81	*****	0.85 (0.11, 6.49)	0.876
ACEI (183-day prior, 14-day gap)	749	*****	*****	*****	*****	276.79	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	50	*****	*****	*****	*****	347.22	*****	0	*****	1.00 (0.06, 15.99)	1
ACEI (183-day prior, 14-day gap)	50	*****	*****	*****	*****	347.22	*****				

Table 5. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183,-1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	57	*****	*****	*****	*****	261.78	*****	16.08	*****	1.11 (0.07, 17.85)	0.939
ACEI (183-day prior, 14-day gap)	61	*****	*****	*****	*****	245.7	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	45	*****	*****	*****	*****	0	*****	-136.2	*****	-	-
ACEI (183-day prior, 14-day gap)	490	*****	*****	*****	*****	136.2	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	22	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	22	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	35	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	38	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	32	*****	*****	*****	*****	0	*****	-73.62	*****	-	-
ACEI (183-day prior, 14-day gap)	402	*****	*****	*****	*****	73.62	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	14	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	14	*****	*****	*****	*****	0	*****				

Table 5. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183,-1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	28	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	33	*****	*****	*****	*****	0	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	22	*****	*****	*****	*****	0	*****	-47.33	*****	-	-
ACEI (183-day prior, 14-day gap)	205	*****	*****	*****	*****	47.33	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	20	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	11	*****	*****	*****	*****	0	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	18	*****	*****	*****	*****	0	*****	-92.65	*****	-	-
ACEI (183-day prior, 14-day gap)	148	*****	*****	*****	*****	92.65	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	16	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 6. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (ever, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	69,145	*****	*****	*****	*****	1.99	*****				
ACEI (14-day gap)	687,565	*****	*****	*****	*****	5.88	*****	-3.89	*****	0.32 (0.24, 0.43)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05 ¹											
SV (14-day gap, history of ACEI (-183, -1))	69,144	*****	*****	*****	*****	2.38	*****				
ACEI (14-day gap)	69,144	*****	*****	*****	*****	8.5	*****	-6.12	*****	0.28 (0.19, 0.41)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	69,144	*****	*****	*****	*****	1.99	*****				
ACEI (14-day gap)	69,144	*****	*****	*****	*****	5.58	*****	-3.59	*****	0.34 (0.25, 0.47)	<0.001
Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	494	*****	*****	*****	*****	25.6	*****				
ACEI (14-day gap)	7,317	*****	*****	*****	*****	97.12	*****	-71.51	*****	0.25 (0.09, 0.67)	0.006
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05 ¹											
SV (14-day gap, history of ACEI (-183, -1))	487	*****	*****	*****	*****	24.08	*****				
ACEI (14-day gap)	487	*****	*****	*****	*****	144.51	*****	-120.42	*****	0.17 (0.04, 0.74)	0.019
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	487	*****	*****	*****	*****	25.94	*****				
ACEI (14-day gap)	487	*****	*****	*****	*****	112.88	*****	-86.94	*****	0.23 (0.08, 0.68)	0.008

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 7. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Serious Allergies

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	61,592	*****	*****	*****	*****	2.08	*****	-4.4	*****	0.31 (0.23, 0.41)	<0.001
ACEI (14-day gap)	583,922	*****	*****	*****	*****	6.47	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05 ¹											
SV (14-day gap, history of ACEI (-183, -1))	61,582	*****	*****	*****	*****	2.4	*****	-6.08	*****	0.28 (0.19, 0.42)	<0.001
ACEI (14-day gap)	61,582	*****	*****	*****	*****	8.47	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	61,582	*****	*****	*****	*****	2.08	*****	-3.7	*****	0.34 (0.25, 0.48)	<0.001
ACEI (14-day gap)	61,582	*****	*****	*****	*****	5.77	*****				
Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	8,047	*****	*****	*****	*****	2.69	*****	-5.63	*****	0.31 (0.15, 0.66)	0.002
ACEI (14-day gap)	110,960	*****	*****	*****	*****	8.32	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05 ¹											
SV (14-day gap, history of ACEI (-183, -1))	8,038	*****	*****	*****	*****	3.46	*****	-7.61	*****	0.31 (0.11, 0.85)	0.023
ACEI (14-day gap)	8,038	*****	*****	*****	*****	11.07	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	8,038	*****	*****	*****	*****	2.69	*****	-4.38	*****	0.36 (0.15, 0.85)	0.02
ACEI (14-day gap)	8,038	*****	*****	*****	*****	7.07	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 8. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Sex: Male											
Overall											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	48,440	*****	*****	*****	*****	2.4	*****	-3.58	*****	0.38 (0.28, 0.52)	<0.001
ACEI (14-day gap)	353,015	*****	*****	*****	*****	5.98	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	48,398	*****	*****	*****	*****	2.67	*****	-5.84	*****	0.31 (0.20, 0.49)	<0.001
ACEI (14-day gap)	48,398	*****	*****	*****	*****	8.51	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	48,398	*****	*****	*****	*****	2.4	*****	-2.99	*****	0.43 (0.30, 0.61)	<0.001
ACEI (14-day gap)	48,398	*****	*****	*****	*****	5.39	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	48,440	*****	*****	*****	*****	3.06	*****	-11.55	*****	0.21 (0.11, 0.38)	<0.001
ACEI (14-day gap)	353,015	*****	*****	*****	*****	14.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	48,398	*****	*****	*****	*****	2.88	*****	-12.96	*****	0.18 (0.09, 0.36)	<0.001
ACEI (14-day gap)	48,398	*****	*****	*****	*****	15.85	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	48,398	*****	*****	*****	*****	3.06	*****	-12.32	*****	0.20 (0.10, 0.38)	<0.001
ACEI (14-day gap)	48,398	*****	*****	*****	*****	15.38	*****				

Table 8. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	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% Confidence Interval) ²	Wald P-Value ²	
			Person Days at Risk	Person Years at Risk								
31 - 60 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	39,001	*****	*****	*****	*****	3.76	*****		-1.83	*****	0.67 (0.35, 1.27)	0.22
ACEI (14-day gap)	325,549	*****	*****	*****	*****	5.59	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	35,714	*****	*****	*****	*****	4.19	*****		-0.93	*****	0.82 (0.34, 1.97)	0.655
ACEI (14-day gap)	35,714	*****	*****	*****	*****	5.12	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	38,972	*****	*****	*****	*****	3.77	*****		-0.03	*****	0.97 (0.42, 2.25)	0.948
ACEI (14-day gap)	44,405	*****	*****	*****	*****	3.8	*****					
61 - 90 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	26,480	*****	*****	*****	*****	3.54	*****		-1.19	*****	0.75 (0.35, 1.63)	0.47
ACEI (14-day gap)	236,720	*****	*****	*****	*****	4.74	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	18,101	*****	*****	*****	*****	3.95	*****		-3.95	*****	0.50 (0.17, 1.46)	0.206
ACEI (14-day gap)	18,101	*****	*****	*****	*****	7.91	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	26,460	*****	*****	*****	*****	3.55	*****		-2.76	*****	0.56 (0.23, 1.37)	0.205
ACEI (14-day gap)	33,143	*****	*****	*****	*****	6.31	*****					

Table 8. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	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% Confidence Interval) ²	Wald P-Value ²	
			Person Days at Risk	Person Years at Risk								
91 - 180 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	21,352	*****	*****	*****	*****	0.25	*****		-3.26	*****	0.07 (0.01, 0.50)	0.008
ACEI (14-day gap)	203,872	*****	*****	*****	*****	3.5	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	12,542	*****	*****	*****	*****	0	*****		-2.84	*****	-	-
ACEI (14-day gap)	12,542	*****	*****	*****	*****	2.84	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	21,337	*****	*****	*****	*****	0.25	*****		-2.51	*****	0.09 (0.01, 0.66)	0.018
ACEI (14-day gap)	28,497	*****	*****	*****	*****	2.75	*****					
181 - 270 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	13,288	*****	*****	*****	*****	2.57	*****		-0.83	*****	0.75 (0.35, 1.63)	0.469
ACEI (14-day gap)	120,238	*****	*****	*****	*****	3.41	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	4,429	*****	*****	*****	*****	1.37	*****		-1.37	*****	0.50 (0.05, 5.51)	0.571
ACEI (14-day gap)	4,429	*****	*****	*****	*****	2.74	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	13,277	*****	*****	*****	*****	2.58	*****		1.04	*****	1.64 (0.52, 5.16)	0.399
ACEI (14-day gap)	16,416	*****	*****	*****	*****	1.54	*****					

Table 8. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	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% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk							
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	9,303	*****	*****	*****	*****	2.43	*****	-0.48	*****	0.81 (0.33, 2.03)	0.658
ACEI (14-day gap)	84,117	*****	*****	*****	*****	2.91	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	2,042	*****	*****	*****	*****	2.65	*****	2.65	*****	-	-
ACEI (14-day gap)	2,042	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	9,299	*****	*****	*****	*****	2.43	*****	1.16	*****	1.87 (0.45, 7.84)	0.39
ACEI (14-day gap)	10,933	*****	*****	*****	*****	1.27	*****				
Sex: Female											
Overall											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	21,199	*****	*****	*****	*****	1.52	*****	-6	*****	0.19 (0.11, 0.35)	<0.001
ACEI (14-day gap)	341,867	*****	*****	*****	*****	7.53	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	21,198	*****	*****	*****	*****	2.47	*****	-9.38	*****	0.21 (0.11, 0.41)	<0.001
ACEI (14-day gap)	21,198	*****	*****	*****	*****	11.84	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	21,198	*****	*****	*****	*****	1.52	*****	-6.1	*****	0.19 (0.10, 0.36)	<0.001
ACEI (14-day gap)	21,198	*****	*****	*****	*****	7.62	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	21,199	*****	*****	*****	*****	4.49	*****	-11.64	*****	0.27 (0.13, 0.58)	<0.001
ACEI (14-day gap)	341,867	*****	*****	*****	*****	16.13	*****				

Table 8. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	21,198	*****	*****	*****	*****	4.65	*****				
ACEI (14-day gap)	21,198	*****	*****	*****	*****	22.6	*****	-17.95	*****	0.21 (0.09, 0.46)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	21,198	*****	*****	*****	*****	4.49	*****				
ACEI (14-day gap)	21,198	*****	*****	*****	*****	21.48	*****	-16.99	*****	0.21 (0.09, 0.46)	<0.001
31 - 60 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	16,795	*****	*****	*****	*****	1.77	*****				
ACEI (14-day gap)	312,817	*****	*****	*****	*****	6.52	*****	-4.76	*****	0.27 (0.07, 1.11)	0.069
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	15,272	*****	*****	*****	*****	2.23	*****				
ACEI (14-day gap)	15,272	*****	*****	*****	*****	5.57	*****	-3.34	*****	0.40 (0.08, 2.06)	0.273
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	16,794	*****	*****	*****	*****	1.77	*****				
ACEI (14-day gap)	19,286	*****	*****	*****	*****	6.66	*****	-4.9	*****	0.27 (0.06, 1.23)	0.09

Table 8. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	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% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk							
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	11,175	*****	*****	*****	*****	0	*****	-6.88	*****	-	-
ACEI (14-day gap)	226,249	*****	*****	*****	*****	6.88	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	7,313	*****	*****	*****	*****	0	*****	-3.97	*****	-	-
ACEI (14-day gap)	7,313	*****	*****	*****	*****	3.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	11,174	*****	*****	*****	*****	0	*****	-2.83	*****	-	-
ACEI (14-day gap)	13,934	*****	*****	*****	*****	2.83	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	8,919	*****	*****	*****	*****	1.18	*****	-4.13	*****	0.22 (0.05, 0.89)	0.034
ACEI (14-day gap)	193,840	*****	*****	*****	*****	5.31	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	4,920	*****	*****	*****	*****	1.43	*****	-5.74	*****	0.20 (0.02, 1.71)	0.142
ACEI (14-day gap)	4,920	*****	*****	*****	*****	7.17	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	8,918	*****	*****	*****	*****	1.18	*****	-3.07	*****	0.28 (0.06, 1.28)	0.101
ACEI (14-day gap)	11,847	*****	*****	*****	*****	4.25	*****				

Table 8. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	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% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk							
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	5,565	*****	*****	*****	*****	0	*****	-4.87	*****	-	-
ACEI (14-day gap)	115,286	*****	*****	*****	*****	4.87	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	1,759	*****	*****	*****	*****	0	*****	-6.82	*****	-	-
ACEI (14-day gap)	1,759	*****	*****	*****	*****	6.82	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	5,565	*****	*****	*****	*****	0	*****	-5.21	*****	-	-
ACEI (14-day gap)	6,776	*****	*****	*****	*****	5.21	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	3,879	*****	*****	*****	*****	0	*****	-4.21	*****	-	-
ACEI (14-day gap)	80,639	*****	*****	*****	*****	4.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	834	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	834	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	3,882	*****	*****	*****	*****	0	*****	-1.02	*****	-	-
ACEI (14-day gap)	4,528	*****	*****	*****	*****	1.02	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 9. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 18-44 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	2,412	*****	*****	*****	*****	1.3	*****	-7.86	*****	0.14 (0.02, 1.03)	0.053
ACEI (14-day gap)	21,587	*****	*****	*****	*****	9.15	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	2,385	*****	*****	*****	*****	2.49	*****	-4.99	*****	0.33 (0.03, 3.20)	0.341
ACEI (14-day gap)	2,385	*****	*****	*****	*****	7.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	2,385	*****	*****	*****	*****	1.31	*****	-3.65	*****	0.25 (0.03, 2.28)	0.221
ACEI (14-day gap)	2,385	*****	*****	*****	*****	4.96	*****				
Age Group: 45-54 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	5,115	*****	*****	*****	*****	2.92	*****	-7.36	*****	0.28 (0.12, 0.69)	0.006
ACEI (14-day gap)	45,057	*****	*****	*****	*****	10.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	5,075	*****	*****	*****	*****	3.26	*****	-9.79	*****	0.25 (0.07, 0.89)	0.032
ACEI (14-day gap)	5,075	*****	*****	*****	*****	13.05	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	5,075	*****	*****	*****	*****	2.94	*****	-6.18	*****	0.31 (0.11, 0.84)	0.022
ACEI (14-day gap)	5,075	*****	*****	*****	*****	9.12	*****				

Table 9. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 55-64 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	11,494	*****	*****	*****	*****	2.62	*****				
ACEI (14-day gap)	97,244	*****	*****	*****	*****	8.94	*****	-6.32	*****	0.29 (0.15, 0.54)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	11,435	*****	*****	*****	*****	3.76	*****				
ACEI (14-day gap)	11,435	*****	*****	*****	*****	11.74	*****	-7.98	*****	0.32 (0.14, 0.71)	0.005
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	11,435	*****	*****	*****	*****	2.63	*****				
ACEI (14-day gap)	11,435	*****	*****	*****	*****	8.44	*****	-5.81	*****	0.30 (0.15, 0.61)	<0.001
Age Group: 65+ Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	50,618	*****	*****	*****	*****	2	*****				
ACEI (14-day gap)	530,994	*****	*****	*****	*****	6.03	*****	-4.03	*****	0.32 (0.23, 0.44)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	50,470	*****	*****	*****	*****	2.2	*****				
ACEI (14-day gap)	50,470	*****	*****	*****	*****	7.76	*****	-5.56	*****	0.28 (0.18, 0.45)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	50,470	*****	*****	*****	*****	2.01	*****				
ACEI (14-day gap)	50,470	*****	*****	*****	*****	5.07	*****	-3.06	*****	0.38 (0.26, 0.55)	<0.001

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 18-44											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,412	*****	*****	*****	*****	1.3	*****	-7.86	*****	0.14 (0.02, 1.03)	0.053
ACEI (183-day prior, 14-day gap)	21,587	*****	*****	*****	*****	9.15	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	2.49	*****	-4.99	*****	0.33 (0.03, 3.20)	0.341
ACEI (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	7.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	1.31	*****	-3.65	*****	0.25 (0.03, 2.28)	0.221
ACEI (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	4.96	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,412	*****	*****	*****	*****	0	*****	-18.03	*****	-	-
ACEI (183-day prior, 14-day gap)	21,587	*****	*****	*****	*****	18.03	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	0	*****	-17.89	*****	-	-
ACEI (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	17.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	0	*****	-15.97	*****	-	-
ACEI (183-day prior, 14-day gap)	2,385	*****	*****	*****	*****	15.97	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,896	*****	*****	*****	*****	7.93	*****	-0.4	*****	1.00 (0.13, 7.77)	0.998
ACEI (183-day prior, 14-day gap)	19,995	*****	*****	*****	*****	8.33	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,698	*****	*****	*****	*****	10.46	*****	10.46	*****	-	-
ACEI (183-day prior, 14-day gap)	1,698	*****	*****	*****	*****	0	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,880	*****	*****	*****	*****	8	*****	8	*****	-	-
ACEI (183-day prior, 14-day gap)	2,154	*****	*****	*****	*****	0	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,216	*****	*****	*****	*****	0	*****	-7.42	*****	-	-
ACEI (183-day prior, 14-day gap)	12,614	*****	*****	*****	*****	7.42	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	719	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	719	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,204	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	1,414	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	966	*****	*****	*****	*****	0	*****	-5.85	*****	-	-
ACEI (183-day prior, 14-day gap)	10,169	*****	*****	*****	*****	5.85	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	441	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	441	*****	*****	*****	*****	0	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	956	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	1,139	*****	*****	*****	*****	0	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	562	*****	*****	*****	*****	0	*****	-7.89	*****	-	-
ACEI (183-day prior, 14-day gap)	5,183	*****	*****	*****	*****	7.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	141	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	141	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	555	*****	*****	*****	*****	0	*****	-9.27	*****	-	-
ACEI (183-day prior, 14-day gap)	573	*****	*****	*****	*****	9.27	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	383	*****	*****	*****	*****	0	*****	-1.38	*****	-	-
ACEI (183-day prior, 14-day gap)	3,344	*****	*****	*****	*****	1.38	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	378	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	353	*****	*****	*****	*****	0	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 45-54											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	5,115	*****	*****	*****	*****	2.92	*****	-7.36	*****	0.28 (0.12, 0.69)	0.006
ACEI (183-day prior, 14-day gap)	45,057	*****	*****	*****	*****	10.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	3.26	*****	-9.79	*****	0.25 (0.07, 0.89)	0.032
ACEI (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	13.05	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	2.94	*****	-6.18	*****	0.31 (0.11, 0.84)	0.022
ACEI (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	9.12	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	5,115	*****	*****	*****	*****	5.27	*****	-18.42	*****	0.22 (0.05, 0.89)	0.033
ACEI (183-day prior, 14-day gap)	45,057	*****	*****	*****	*****	23.69	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	5.52	*****	-24.82	*****	0.18 (0.04, 0.82)	0.027
ACEI (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	30.34	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	5.31	*****	-27.1	*****	0.16 (0.04, 0.72)	0.017
ACEI (183-day prior, 14-day gap)	5,075	*****	*****	*****	*****	32.41	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	4,098	*****	*****	*****	*****	7.33	*****	-1.87	*****	0.82 (0.20, 3.47)	0.791
ACEI (183-day prior, 14-day gap)	41,763	*****	*****	*****	*****	9.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	3,697	*****	*****	*****	*****	4.72	*****	4.72	*****	-	-
ACEI (183-day prior, 14-day gap)	3,697	*****	*****	*****	*****	0	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	4,069	*****	*****	*****	*****	7.38	*****	7.38	*****	-	-
ACEI (183-day prior, 14-day gap)	4,617	*****	*****	*****	*****	0	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,644	*****	*****	*****	*****	0	*****	-9.51	*****	-	-
ACEI (183-day prior, 14-day gap)	27,857	*****	*****	*****	*****	9.51	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,646	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	1,646	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,629	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	3,190	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,067	*****	*****	*****	*****	0	*****	-5.25	*****	-	-
ACEI (183-day prior, 14-day gap)	22,987	*****	*****	*****	*****	5.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,055	*****	*****	*****	*****	0	*****	-6.84	*****	-	-
ACEI (183-day prior, 14-day gap)	1,055	*****	*****	*****	*****	6.84	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,055	*****	*****	*****	*****	0	*****	-4.46	*****	-	-
ACEI (183-day prior, 14-day gap)	2,606	*****	*****	*****	*****	4.46	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,282	*****	*****	*****	*****	0	*****	-4.42	*****	-	-
ACEI (183-day prior, 14-day gap)	12,534	*****	*****	*****	*****	4.42	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	358	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	358	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,276	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	1,388	*****	*****	*****	*****	0	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	910	*****	*****	*****	*****	4.91	*****	-0.56	*****	0.91 (0.12, 7.11)	0.926
ACEI (183-day prior, 14-day gap)	8,409	*****	*****	*****	*****	5.47	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	173	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	173	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	905	*****	*****	*****	*****	4.93	*****	-5.63	*****	0.48 (0.04, 5.33)	0.553
ACEI (183-day prior, 14-day gap)	896	*****	*****	*****	*****	10.57	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 55-64											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	11,494	*****	*****	*****	*****	2.62	*****	-6.32	*****	0.29 (0.15, 0.54)	<0.001
ACEI (183-day prior, 14-day gap)	97,244	*****	*****	*****	*****	8.94	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	3.76	*****	-7.98	*****	0.32 (0.14, 0.71)	0.005
ACEI (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	11.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	2.63	*****	-5.81	*****	0.30 (0.15, 0.61)	<0.001
ACEI (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	8.44	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	11,494	*****	*****	*****	*****	2.38	*****	-14.94	*****	0.14 (0.03, 0.55)	0.005
ACEI (183-day prior, 14-day gap)	97,244	*****	*****	*****	*****	17.32	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	2.48	*****	-19.85	*****	0.11 (0.03, 0.48)	0.003
ACEI (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	22.33	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	2.4	*****	-17.47	*****	0.12 (0.03, 0.51)	0.004
ACEI (183-day prior, 14-day gap)	11,435	*****	*****	*****	*****	19.86	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	8,991	*****	*****	*****	*****	6.63	*****	-1.11	*****	0.86 (0.31, 2.40)	0.78
ACEI (183-day prior, 14-day gap)	89,848	*****	*****	*****	*****	7.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	8,175	*****	*****	*****	*****	8.35	*****	4.18	*****	2.00 (0.37, 10.92)	0.423
ACEI (183-day prior, 14-day gap)	8,175	*****	*****	*****	*****	4.18	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,947	*****	*****	*****	*****	6.66	*****	1.19	*****	1.21 (0.30, 4.83)	0.791
ACEI (183-day prior, 14-day gap)	10,478	*****	*****	*****	*****	5.47	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	5,921	*****	*****	*****	*****	4.56	*****	-2.77	*****	0.63 (0.15, 2.64)	0.532
ACEI (183-day prior, 14-day gap)	62,798	*****	*****	*****	*****	7.33	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	3,863	*****	*****	*****	*****	3.76	*****	-7.52	*****	0.33 (0.03, 3.20)	0.341
ACEI (183-day prior, 14-day gap)	3,863	*****	*****	*****	*****	11.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	5,890	*****	*****	*****	*****	4.59	*****	-5.96	*****	0.44 (0.09, 2.19)	0.318
ACEI (183-day prior, 14-day gap)	7,492	*****	*****	*****	*****	10.54	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	4,693	*****	*****	*****	*****	0	*****	-6.39	*****	-	-
ACEI (183-day prior, 14-day gap)	52,858	*****	*****	*****	*****	6.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,597	*****	*****	*****	*****	0	*****	-2.75	*****	-	-
ACEI (183-day prior, 14-day gap)	2,597	*****	*****	*****	*****	2.75	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	4,666	*****	*****	*****	*****	0	*****	-4.48	*****	-	-
ACEI (183-day prior, 14-day gap)	6,324	*****	*****	*****	*****	4.48	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,889	*****	*****	*****	*****	1.68	*****	-4.87	*****	0.26 (0.04, 1.88)	0.182
ACEI (183-day prior, 14-day gap)	29,789	*****	*****	*****	*****	6.55	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	857	*****	*****	*****	*****	0	*****	-6.89	*****	-	-
ACEI (183-day prior, 14-day gap)	857	*****	*****	*****	*****	6.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,875	*****	*****	*****	*****	1.68	*****	-4.1	*****	0.29 (0.03, 2.61)	0.27
ACEI (183-day prior, 14-day gap)	3,516	*****	*****	*****	*****	5.79	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,036	*****	*****	*****	*****	2.25	*****	-4.07	*****	0.35 (0.05, 2.60)	0.307
ACEI (183-day prior, 14-day gap)	20,218	*****	*****	*****	*****	6.32	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	407	*****	*****	*****	*****	13.8	*****	13.8	*****	-	-
ACEI (183-day prior, 14-day gap)	407	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,028	*****	*****	*****	*****	2.26	*****	0.2	*****	0.96 (0.06, 15.62)	0.98
ACEI (183-day prior, 14-day gap)	2,286	*****	*****	*****	*****	2.06	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 65+											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	50,618	*****	*****	*****	*****	2	*****	-4.03	*****	0.32 (0.23, 0.44)	<0.001
ACEI (183-day prior, 14-day gap)	530,994	*****	*****	*****	*****	6.03	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	2.2	*****	-5.56	*****	0.28 (0.18, 0.45)	<0.001
ACEI (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	7.76	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	2.01	*****	-3.06	*****	0.38 (0.26, 0.55)	<0.001
ACEI (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	5.07	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	50,618	*****	*****	*****	*****	3.72	*****	-10.45	*****	0.26 (0.15, 0.44)	<0.001
ACEI (183-day prior, 14-day gap)	530,994	*****	*****	*****	*****	14.17	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	3.59	*****	-11.32	*****	0.24 (0.13, 0.44)	<0.001
ACEI (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	14.91	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	3.73	*****	-10.03	*****	0.27 (0.15, 0.48)	<0.001
ACEI (183-day prior, 14-day gap)	50,470	*****	*****	*****	*****	13.76	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	40,811	*****	*****	*****	*****	1.79	*****	-3.6	*****	0.33 (0.14, 0.81)	0.015
ACEI (183-day prior, 14-day gap)	486,760	*****	*****	*****	*****	5.4	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	37,246	*****	*****	*****	*****	2.21	*****	-2.65	*****	0.45 (0.16, 1.31)	0.144
ACEI (183-day prior, 14-day gap)	37,246	*****	*****	*****	*****	4.86	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	40,696	*****	*****	*****	*****	1.8	*****	-3.65	*****	0.33 (0.12, 0.88)	0.027
ACEI (183-day prior, 14-day gap)	46,185	*****	*****	*****	*****	5.45	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	27,874	*****	*****	*****	*****	2.4	*****	-2.77	*****	0.47 (0.19, 1.14)	0.093
ACEI (183-day prior, 14-day gap)	359,705	*****	*****	*****	*****	5.18	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	19,364	*****	*****	*****	*****	1.47	*****	-1.47	*****	0.50 (0.09, 2.73)	0.423
ACEI (183-day prior, 14-day gap)	19,364	*****	*****	*****	*****	2.95	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	27,793	*****	*****	*****	*****	2.41	*****	-1.32	*****	0.65 (0.22, 1.90)	0.433
ACEI (183-day prior, 14-day gap)	34,914	*****	*****	*****	*****	3.73	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	22,545	*****	*****	*****	*****	0.7	*****	-3.26	*****	0.18 (0.06, 0.56)	0.003
ACEI (183-day prior, 14-day gap)	311,698	*****	*****	*****	*****	3.96	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	13,620	*****	*****	*****	*****	0	*****	-3.1	*****	-	-
ACEI (183-day prior, 14-day gap)	13,620	*****	*****	*****	*****	3.1	*****				

Table 10. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	22,479	*****	*****	*****	*****	0.7	*****	-1.87	*****	0.27 (0.08, 0.94)	0.039
ACEI (183-day prior, 14-day gap)	30,209	*****	*****	*****	*****	2.57	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	14,120	*****	*****	*****	*****	2.08	*****	-1.55	*****	0.57 (0.25, 1.30)	0.181
ACEI (183-day prior, 14-day gap)	188,019	*****	*****	*****	*****	3.63	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	4,956	*****	*****	*****	*****	2.41	*****	-2.41	*****	0.50 (0.09, 2.73)	0.423
ACEI (183-day prior, 14-day gap)	4,956	*****	*****	*****	*****	4.83	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	14,084	*****	*****	*****	*****	2.08	*****	-0.76	*****	0.72 (0.26, 1.98)	0.527
ACEI (183-day prior, 14-day gap)	17,695	*****	*****	*****	*****	2.84	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	9,854	*****	*****	*****	*****	1.38	*****	-1.68	*****	0.45 (0.14, 1.42)	0.173
ACEI (183-day prior, 14-day gap)	132,787	*****	*****	*****	*****	3.06	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,346	*****	*****	*****	*****	2.29	*****	-2.29	*****	0.50 (0.05, 5.51)	0.571
ACEI (183-day prior, 14-day gap)	2,346	*****	*****	*****	*****	4.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	9,839	*****	*****	*****	*****	1.38	*****	0.6	*****	1.76 (0.29, 10.51)	0.537
ACEI (183-day prior, 14-day gap)	11,906	*****	*****	*****	*****	0.78	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 11. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Unknown											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	11,656	*****	*****	*****	*****	1.26	*****	-5.51	*****	0.18 (0.07, 0.43)	<0.001
ACEI (14-day gap)	99,645	*****	*****	*****	*****	6.77	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	11,647	*****	*****	*****	*****	1.82	*****	-7.28	*****	0.20 (0.07, 0.59)	0.003
ACEI (14-day gap)	11,647	*****	*****	*****	*****	9.09	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	11,647	*****	*****	*****	*****	1.26	*****	-5.1	*****	0.20 (0.08, 0.51)	<0.001
ACEI (14-day gap)	11,647	*****	*****	*****	*****	6.36	*****				
Race: American Indian											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	242	*****	*****	*****	*****	0	*****	-2.38	*****	-	-
ACEI (14-day gap)	4,525	*****	*****	*****	*****	2.38	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	234	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	234	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	234	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	234	*****	*****	*****	*****	0	*****				

Table 11. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Asian											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	666	*****	*****	*****	*****	0	*****	-2.63	*****	-	-
ACEI (14-day gap)	7,871	*****	*****	*****	*****	2.63	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	656	*****	*****	*****	*****	0	*****	-8.2	*****	-	-
ACEI (14-day gap)	656	*****	*****	*****	*****	8.2	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	656	*****	*****	*****	*****	0	*****	-3.98	*****	-	-
ACEI (14-day gap)	656	*****	*****	*****	*****	3.98	*****				
Race: Black											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	9,015	*****	*****	*****	*****	5.6	*****	-16.98	*****	0.24 (0.14, 0.39)	<0.001
ACEI (14-day gap)	92,098	*****	*****	*****	*****	22.58	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	8,997	*****	*****	*****	*****	8.01	*****	-14.02	*****	0.36 (0.19, 0.70)	0.003
ACEI (14-day gap)	8,997	*****	*****	*****	*****	22.03	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	8,997	*****	*****	*****	*****	5.62	*****	-11.34	*****	0.32 (0.18, 0.56)	<0.001
ACEI (14-day gap)	8,997	*****	*****	*****	*****	16.96	*****				

Table 11. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Pacific Islander											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	66	*****	*****	*****	*****	53.19	*****	38.83	*****	1.89 (0.19, 18.82)	0.588
ACEI (14-day gap)	741	*****	*****	*****	*****	14.36	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	59	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	59	*****	*****	*****	*****	0	*****				
Race: White											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	47,994	*****	*****	*****	*****	1.79	*****	-2.56	*****	0.40 (0.28, 0.57)	<0.001
ACEI (14-day gap)	490,002	*****	*****	*****	*****	4.35	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	47,950	*****	*****	*****	*****	1.69	*****	-4.07	*****	0.29 (0.17, 0.50)	<0.001
ACEI (14-day gap)	47,950	*****	*****	*****	*****	5.76	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	47,950	*****	*****	*****	*****	1.79	*****	-2.28	*****	0.42 (0.28, 0.63)	<0.001
ACEI (14-day gap)	47,950	*****	*****	*****	*****	4.08	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Unknown											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	11,656	*****	*****	*****	*****	1.26	*****	-5.51	*****	0.18 (0.07, 0.43)	<0.001
ACEI (183-day prior, 14-day gap)	99,645	*****	*****	*****	*****	6.77	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	1.82	*****	-7.28	*****	0.20 (0.07, 0.59)	0.003
ACEI (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	9.09	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	1.26	*****	-5.1	*****	0.20 (0.08, 0.51)	<0.001
ACEI (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	6.36	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	11,656	*****	*****	*****	*****	1.19	*****	-14.8	*****	0.07 (0.01, 0.51)	0.009
ACEI (183-day prior, 14-day gap)	99,645	*****	*****	*****	*****	15.99	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	1.24	*****	-13.6	*****	0.08 (0.01, 0.64)	0.017
ACEI (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	14.84	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	1.19	*****	-13	*****	0.08 (0.01, 0.63)	0.016
ACEI (183-day prior, 14-day gap)	11,647	*****	*****	*****	*****	14.19	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	8,924	*****	*****	*****	*****	3.27	*****	-1.79	*****	0.65 (0.16, 2.72)	0.557
ACEI (183-day prior, 14-day gap)	91,186	*****	*****	*****	*****	5.05	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	8,088	*****	*****	*****	*****	4.12	*****	0	*****	1.00 (0.14, 7.10)	1
ACEI (183-day prior, 14-day gap)	8,088	*****	*****	*****	*****	4.12	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,917	*****	*****	*****	*****	3.27	*****	-0.79	*****	0.80 (0.13, 4.82)	0.812
ACEI (183-day prior, 14-day gap)	10,535	*****	*****	*****	*****	4.06	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	6,151	*****	*****	*****	*****	2.19	*****	-3.13	*****	0.42 (0.06, 3.07)	0.391
ACEI (183-day prior, 14-day gap)	64,648	*****	*****	*****	*****	5.32	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	4,017	*****	*****	*****	*****	0	*****	-10.88	*****	-	-
ACEI (183-day prior, 14-day gap)	4,017	*****	*****	*****	*****	10.88	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	6,145	*****	*****	*****	*****	2.19	*****	-6.54	*****	0.25 (0.03, 2.15)	0.207
ACEI (183-day prior, 14-day gap)	7,599	*****	*****	*****	*****	8.73	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	4,905	*****	*****	*****	*****	0	*****	-4.5	*****	-	-
ACEI (183-day prior, 14-day gap)	53,827	*****	*****	*****	*****	4.5	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,674	*****	*****	*****	*****	0	*****	-7.74	*****	-	-
ACEI (183-day prior, 14-day gap)	2,674	*****	*****	*****	*****	7.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	4,899	*****	*****	*****	*****	0	*****	-4.41	*****	-	-
ACEI (183-day prior, 14-day gap)	6,304	*****	*****	*****	*****	4.41	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	3,093	*****	*****	*****	*****	0	*****	-3.81	*****	-	-
ACEI (183-day prior, 14-day gap)	31,199	*****	*****	*****	*****	3.81	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	950	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	950	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	3,092	*****	*****	*****	*****	0	*****	-4.27	*****	-	-
ACEI (183-day prior, 14-day gap)	3,546	*****	*****	*****	*****	4.27	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,169	*****	*****	*****	*****	2.09	*****	-1.71	*****	0.52 (0.07, 3.92)	0.528
ACEI (183-day prior, 14-day gap)	21,466	*****	*****	*****	*****	3.8	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	443	*****	*****	*****	*****	12.22	*****	12.22	*****	-	-
ACEI (183-day prior, 14-day gap)	443	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,168	*****	*****	*****	*****	2.09	*****	2.09	*****	-	-
ACEI (183-day prior, 14-day gap)	2,331	*****	*****	*****	*****	0	*****				
Race: American Indian											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	242	*****	*****	*****	*****	0	*****	-2.38	*****	-	-
ACEI (183-day prior, 14-day gap)	4,525	*****	*****	*****	*****	2.38	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	242	*****	*****	*****	*****	0	*****	-5.54	*****	-	-
ACEI (183-day prior, 14-day gap)	4,525	*****	*****	*****	*****	5.54	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	187	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	4,184	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	168	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	168	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	182	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	218	*****	*****	*****	*****	0	*****	0	*****	-	-
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	117	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	2,739	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	78	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	78	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	114	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	153	*****	*****	*****	*****	0	*****	0	*****	-	-
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	97	*****	*****	*****	*****	0	*****	-5.01	*****	-	-
ACEI (183-day prior, 14-day gap)	2,252	*****	*****	*****	*****	5.01	*****	-5.01	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	51	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	51	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	94	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	121	*****	*****	*****	*****	0	*****	0	*****	-	-
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	54	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	1,257	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	54	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	65	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	36	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	837	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	37	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	47	*****	*****	*****	*****	0	*****	0	*****	-	-
Race: Asian											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	666	*****	*****	*****	*****	0	*****	-2.63	*****	-	-
ACEI (183-day prior, 14-day gap)	7,871	*****	*****	*****	*****	2.63	*****	-8.2	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	656	*****	*****	*****	*****	0	*****	-8.2	*****	-	-
ACEI (183-day prior, 14-day gap)	656	*****	*****	*****	*****	8.2	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	per 1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	656	*****	*****	*****	*****	0	*****			-	-
ACEI (183-day prior, 14-day gap)	656	*****	*****	*****	*****	3.98	*****	-3.98	*****		
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	666	*****	*****	*****	*****	0	*****			-	-
ACEI (183-day prior, 14-day gap)	7,871	*****	*****	*****	*****	4.83	*****	-4.83	*****		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	656	*****	*****	*****	*****	0	*****			-	-
ACEI (183-day prior, 14-day gap)	656	*****	*****	*****	*****	21.84	*****	-21.84	*****		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	656	*****	*****	*****	*****	0	*****			-	-
ACEI (183-day prior, 14-day gap)	656	*****	*****	*****	*****	19.49	*****	-19.49	*****		
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	507	*****	*****	*****	*****	0	*****			-	-
ACEI (183-day prior, 14-day gap)	7,147	*****	*****	*****	*****	6.02	*****	-6.02	*****		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	454	*****	*****	*****	*****	0	*****			-	-
ACEI (183-day prior, 14-day gap)	454	*****	*****	*****	*****	0	*****	0	*****		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	501	*****	*****	*****	*****	0	*****			-	-
ACEI (183-day prior, 14-day gap)	590	*****	*****	*****	*****	0	*****	0	*****		

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	350	*****	*****	*****	*****	0	*****	-5.15	*****	-	-
ACEI (183-day prior, 14-day gap)	5,095	*****	*****	*****	*****	5.15	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	234	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	345	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	429	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	266	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	4,335	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	147	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	147	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	264	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	362	*****	*****	*****	*****	0	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	176	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	2,368	*****	*****	*****	*****	0	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	56	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	56	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	177	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	202	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	124	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	1,546	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	26	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	26	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	128	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	127	*****	*****	*****	*****	0	*****	0	*****	-	-
Race: Black											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	9,015	*****	*****	*****	*****	5.6	*****	-16.98	*****	0.24 (0.14, 0.39)	<0.001
ACEI (183-day prior, 14-day gap)	92,098	*****	*****	*****	*****	22.58	*****	-14.02	*****	0.36 (0.19, 0.70)	0.003
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	8.01	*****	-14.02	*****	0.36 (0.19, 0.70)	0.003
ACEI (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	22.03	*****	-14.02	*****	0.36 (0.19, 0.70)	0.003

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	per 1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	5.62	*****				
ACEI (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	16.96	*****	-11.34	*****	0.32 (0.18, 0.56)	<0.001
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	9,015	*****	*****	*****	*****	12.05	*****				
ACEI (183-day prior, 14-day gap)	92,098	*****	*****	*****	*****	48.75	*****	-36.7	*****	0.24 (0.12, 0.49)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	12.49	*****				
ACEI (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	42.15	*****	-29.66	*****	0.30 (0.13, 0.65)	0.003
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	12.07	*****				
ACEI (183-day prior, 14-day gap)	8,997	*****	*****	*****	*****	40.64	*****	-28.57	*****	0.30 (0.13, 0.65)	0.002
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	7,146	*****	*****	*****	*****	10.79	*****				
ACEI (183-day prior, 14-day gap)	84,673	*****	*****	*****	*****	17.98	*****	-7.19	*****	0.59 (0.24, 1.46)	0.257
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	6,522	*****	*****	*****	*****	11	*****				
ACEI (183-day prior, 14-day gap)	6,522	*****	*****	*****	*****	8.25	*****	2.75	*****	1.33 (0.30, 5.96)	0.706
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	7,131	*****	*****	*****	*****	10.82	*****				
ACEI (183-day prior, 14-day gap)	8,247	*****	*****	*****	*****	12.47	*****	-1.65	*****	0.86 (0.27, 2.70)	0.792

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	4,325	*****	*****	*****	*****	0	*****	-18.68	*****	-	-
ACEI (183-day prior, 14-day gap)	56,518	*****	*****	*****	*****	18.68	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,673	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	2,673	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	4,312	*****	*****	*****	*****	0	*****	-9.48	*****	-	-
ACEI (183-day prior, 14-day gap)	5,589	*****	*****	*****	*****	9.48	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	3,268	*****	*****	*****	*****	1.69	*****	-12.92	*****	0.12 (0.02, 0.83)	0.032
ACEI (183-day prior, 14-day gap)	47,205	*****	*****	*****	*****	14.6	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,643	*****	*****	*****	*****	0	*****	-4.82	*****	-	-
ACEI (183-day prior, 14-day gap)	1,643	*****	*****	*****	*****	4.82	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	3,254	*****	*****	*****	*****	1.69	*****	-12.76	*****	0.11 (0.01, 0.88)	0.037
ACEI (183-day prior, 14-day gap)	4,644	*****	*****	*****	*****	14.45	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,852	*****	*****	*****	*****	2.69	*****	-9.47	*****	0.22 (0.03, 1.58)	0.131
ACEI (183-day prior, 14-day gap)	24,182	*****	*****	*****	*****	12.16	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	485	*****	*****	*****	*****	0	*****	-26.5	*****	-	-
ACEI (183-day prior, 14-day gap)	485	*****	*****	*****	*****	26.5	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,845	*****	*****	*****	*****	2.7	*****	-4.24	*****	0.39 (0.04, 3.74)	0.413
ACEI (183-day prior, 14-day gap)	2,323	*****	*****	*****	*****	6.94	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,245	*****	*****	*****	*****	0	*****	-11.59	*****	-	-
ACEI (183-day prior, 14-day gap)	15,670	*****	*****	*****	*****	11.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	192	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	192	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,240	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	1,386	*****	*****	*****	*****	0	*****				
Race: Pacific Islander											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	66	*****	*****	*****	*****	53.19	*****	38.83	*****	1.89 (0.19, 18.82)	0.588
ACEI (183-day prior, 14-day gap)	741	*****	*****	*****	*****	14.36	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	66	*****	*****	*****	*****	0	*****	-34.75	*****	-	-
ACEI (183-day prior, 14-day gap)	741	*****	*****	*****	*****	34.75	*****	-34.75	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	59	*****	*****	*****	*****	0	*****	0	*****	-	-
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	52	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	654	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	42	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	42	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	49	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	49	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	35	*****	*****	*****	*****	383.14	*****	356.7	*****	7.85 (0.38, 161.1)	0.182
ACEI (183-day prior, 14-day gap)	496	*****	*****	*****	*****	26.44	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	22	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	22	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	32	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	41	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	28	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	424	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	26	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	32	*****	*****	*****	*****	0	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****	-24.5	*****	-	-
ACEI (183-day prior, 14-day gap)	208	*****	*****	*****	*****	24.5	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	16	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	17	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	138	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (183-day prior, 14-day gap)	12	*****	*****	*****	*****	0	*****	0	*****	-	-
Race: White											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	47,994	*****	*****	*****	*****	1.79	*****	-2.56	*****	0.40 (0.28, 0.57)	<0.001
ACEI (183-day prior, 14-day gap)	490,002	*****	*****	*****	*****	4.35	*****	-2.56	*****	0.40 (0.28, 0.57)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	1.69	*****	-4.07	*****	0.29 (0.17, 0.50)	<0.001
ACEI (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	5.76	*****	-4.07	*****	0.29 (0.17, 0.50)	<0.001

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	per 1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	1.79	*****	-2.28	*****	0.42 (0.28, 0.63)	<0.001
ACEI (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	4.08	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	47,994	*****	*****	*****	*****	2.52	*****	-6.66	*****	0.27 (0.14, 0.53)	<0.001
ACEI (183-day prior, 14-day gap)	490,002	*****	*****	*****	*****	9.17	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	2.6	*****	-8.97	*****	0.23 (0.11, 0.46)	<0.001
ACEI (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	11.57	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	2.52	*****	-8.79	*****	0.22 (0.11, 0.45)	<0.001
ACEI (183-day prior, 14-day gap)	47,950	*****	*****	*****	*****	11.3	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	38,981	*****	*****	*****	*****	1.88	*****	-2.29	*****	0.45 (0.19, 1.11)	0.083
ACEI (183-day prior, 14-day gap)	450,526	*****	*****	*****	*****	4.17	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	35,736	*****	*****	*****	*****	1.84	*****	-1.84	*****	0.50 (0.15, 1.66)	0.258
ACEI (183-day prior, 14-day gap)	35,736	*****	*****	*****	*****	3.68	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	38,945	*****	*****	*****	*****	1.88	*****	-1.62	*****	0.53 (0.19, 1.53)	0.243
ACEI (183-day prior, 14-day gap)	43,997	*****	*****	*****	*****	3.5	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	26,678	*****	*****	*****	*****	2.51	*****	-1.24	*****	0.67 (0.27, 1.64)	0.379
ACEI (183-day prior, 14-day gap)	333,484	*****	*****	*****	*****	3.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	18,611	*****	*****	*****	*****	2.29	*****	-0.76	*****	0.75 (0.17, 3.35)	0.706
ACEI (183-day prior, 14-day gap)	18,611	*****	*****	*****	*****	3.06	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	26,652	*****	*****	*****	*****	2.51	*****	-0.63	*****	0.80 (0.26, 2.46)	0.702
ACEI (183-day prior, 14-day gap)	33,227	*****	*****	*****	*****	3.13	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	21,709	*****	*****	*****	*****	0.48	*****	-2.44	*****	0.17 (0.04, 0.67)	0.012
ACEI (183-day prior, 14-day gap)	289,671	*****	*****	*****	*****	2.93	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	13,175	*****	*****	*****	*****	0	*****	-1.06	*****	-	-
ACEI (183-day prior, 14-day gap)	13,175	*****	*****	*****	*****	1.06	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	21,689	*****	*****	*****	*****	0.48	*****	-1.24	*****	0.28 (0.06, 1.30)	0.103
ACEI (183-day prior, 14-day gap)	28,845	*****	*****	*****	*****	1.73	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	13,664	*****	*****	*****	*****	2.14	*****	-1.05	*****	0.67 (0.29, 1.52)	0.339
ACEI (183-day prior, 14-day gap)	176,322	*****	*****	*****	*****	3.19	*****				

Table 12. Effect Estimates of New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	4,841	*****	*****	*****	*****	1.24	*****	-2.48	*****	0.33 (0.03, 3.20)	0.341
ACEI (183-day prior, 14-day gap)	4,841	*****	*****	*****	*****	3.72	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	13,654	*****	*****	*****	*****	2.14	*****	-0.5	*****	0.80 (0.28, 2.23)	0.664
ACEI (183-day prior, 14-day gap)	17,028	*****	*****	*****	*****	2.65	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	9,601	*****	*****	*****	*****	1.88	*****	-0.71	*****	0.72 (0.26, 1.98)	0.53
ACEI (183-day prior, 14-day gap)	125,105	*****	*****	*****	*****	2.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,298	*****	*****	*****	*****	0	*****	-2.29	*****	-	-
ACEI (183-day prior, 14-day gap)	2,298	*****	*****	*****	*****	2.29	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	9,595	*****	*****	*****	*****	1.88	*****	0.28	*****	1.16 (0.29, 4.63)	0.837
ACEI (183-day prior, 14-day gap)	11,538	*****	*****	*****	*****	1.6	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Years at Risk	Person Days at Risk	Person Years at Risk	Number of Events	per 1,000 Person Years	1,000 New	Difference per 1,000 Person	in Risk per 1,000	(95% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	49,140	*****	*****	*****	*****	2.55	*****	-0.47	*****	0.80 (0.58, 1.09)	0.161
ARBs (14-day gap)	337,083	*****	*****	*****	*****	3.02	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	49,137	*****	*****	*****	*****	3.3	*****	-0.1	*****	0.97 (0.61, 1.56)	0.904
ARBs (14-day gap)	49,137	*****	*****	*****	*****	3.4	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	49,137	*****	*****	*****	*****	2.55	*****	-0.31	*****	0.85 (0.58, 1.26)	0.417
ARBs (14-day gap)	49,137	*****	*****	*****	*****	2.85	*****				
Propensity Score Adjusted Stratified Analysis; Percentiles= 10¹											
SV (14-day gap, history of ARBs (-183, -1))	49,140	*****	*****	*****	*****	2.55	*****	-0.47	*****	0.94 (0.68, 1.29)	0.685
ARBs (14-day gap)	337,083	*****	*****	*****	*****	3.02	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 14. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	per 1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	49,140	*****	*****	*****	*****	2.55	*****	-0.47	*****	0.80 (0.58, 1.09)	0.161
ARBs (183-day prior, 14-day gap)	337,083	*****	*****	*****	*****	3.02	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	3.3	*****	-0.1	*****	0.97 (0.61, 1.56)	0.904
ARBs (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	3.4	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	2.55	*****	-0.31	*****	0.85 (0.58, 1.26)	0.417
ARBs (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	2.85	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	49,140	*****	*****	*****	*****	3.86	*****	-2.1	*****	0.64 (0.37, 1.10)	0.104
ARBs (183-day prior, 14-day gap)	337,083	*****	*****	*****	*****	5.96	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	3.69	*****	-1.42	*****	0.72 (0.35, 1.47)	0.371
ARBs (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	5.1	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	3.86	*****	-1.74	*****	0.68 (0.35, 1.33)	0.259
ARBs (183-day prior, 14-day gap)	49,137	*****	*****	*****	*****	5.61	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	39,111	*****	*****	*****	*****	3.01	*****	-0.41	*****	0.89 (0.43, 1.84)	0.748
ARBs (183-day prior, 14-day gap)	316,224	*****	*****	*****	*****	3.42	*****				

Table 14. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	36,512	*****	*****	*****	*****	3.57	*****	-1.34	*****	0.73 (0.29, 1.81)	0.493
ARBs (183-day prior, 14-day gap)	36,512	*****	*****	*****	*****	4.91	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	39,110	*****	*****	*****	*****	3.01	*****	-1.49	*****	0.67 (0.28, 1.58)	0.362
ARBs (183-day prior, 14-day gap)	45,890	*****	*****	*****	*****	4.5	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	26,476	*****	*****	*****	*****	3.55	*****	0.74	*****	1.30 (0.59, 2.86)	0.513
ARBs (183-day prior, 14-day gap)	243,445	*****	*****	*****	*****	2.81	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	19,243	*****	*****	*****	*****	2.97	*****	2.97	*****	-	-
ARBs (183-day prior, 14-day gap)	19,243	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	26,476	*****	*****	*****	*****	3.55	*****	3.55	*****	-	-
ARBs (183-day prior, 14-day gap)	35,682	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	21,374	*****	*****	*****	*****	2.23	*****	-0.02	*****	0.99 (0.50, 1.96)	0.966
ARBs (183-day prior, 14-day gap)	214,230	*****	*****	*****	*****	2.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	13,557	*****	*****	*****	*****	2.61	*****	0	*****	1.00 (0.29, 3.45)	1
ARBs (183-day prior, 14-day gap)	13,557	*****	*****	*****	*****	2.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	21,374	*****	*****	*****	*****	2.23	*****	-0.61	*****	0.78 (0.34, 1.77)	0.552
ARBs (183-day prior, 14-day gap)	31,191	*****	*****	*****	*****	2.84	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	13,101	*****	*****	*****	*****	1.13	*****	-0.94	*****	0.56 (0.17, 1.78)	0.324
ARBs (183-day prior, 14-day gap)	130,069	*****	*****	*****	*****	2.07	*****				

Table 14. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	4,935	*****	*****	*****	*****	3.62	*****	2.41	*****	3.00 (0.31, 28.84)	0.341
ARBs (183-day prior, 14-day gap)	4,935	*****	*****	*****	*****	1.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	13,101	*****	*****	*****	*****	1.13	*****	-0.22	*****	0.84 (0.20, 3.54)	0.817
ARBs (183-day prior, 14-day gap)	18,451	*****	*****	*****	*****	1.35	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	8,995	*****	*****	*****	*****	1.02	*****	-0.53	*****	0.68 (0.16, 2.82)	0.592
ARBs (183-day prior, 14-day gap)	92,640	*****	*****	*****	*****	1.56	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,357	*****	*****	*****	*****	2.26	*****	2.26	*****	-	-
ARBs (183-day prior, 14-day gap)	2,357	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,995	*****	*****	*****	*****	1.02	*****	-0.79	*****	0.58 (0.11, 3.02)	0.521
ARBs (183-day prior, 14-day gap)	12,667	*****	*****	*****	*****	1.81	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 15. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (-183, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	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% Confidence Interval)	Wald P-Value	
No Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	49,082	*****	*****	*****	*****	2.19	*****	-0.24	*****	0.87 (0.62, 1.22)	0.421
ARBs (14-day gap)	336,258	*****	*****	*****	*****	2.43	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	49,079	*****	*****	*****	*****	2.82	*****	0.19	*****	1.07 (0.64, 1.81)	0.789
ARBs (14-day gap)	49,079	*****	*****	*****	*****	2.62	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	49,079	*****	*****	*****	*****	2.19	*****	-0.25	*****	0.87 (0.57, 1.32)	0.501
ARBs (14-day gap)	49,079	*****	*****	*****	*****	2.45	*****				
Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	58	*****	*****	*****	*****	333.15	*****	61.51	*****	1.13 (0.49, 2.58)	0.778
ARBs (14-day gap)	825	*****	*****	*****	*****	271.63	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	55	*****	*****	*****	*****	304.57	*****	-203.05	*****	0.60 (0.14, 2.51)	0.484
ARBs (14-day gap)	55	*****	*****	*****	*****	507.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	55	*****	*****	*****	*****	296.21	*****	13.27	*****	0.76 (0.21, 2.70)	0.672
ARBs (14-day gap)	55	*****	*****	*****	*****	282.94	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183, -1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
No Angioedema (-183, -1)											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	49,082	*****	*****	*****	*****	2.19	*****	-0.24	*****	0.87 (0.62, 1.22)	0.421
ARBs (183-day prior,14-day gap)	336,258	*****	*****	*****	*****	2.43	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	49,079	*****	*****	*****	*****	2.82	*****	0.19	*****	1.07 (0.64, 1.81)	0.789
ARBs (183-day prior,14-day gap)	49,079	*****	*****	*****	*****	2.62	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	49,079	*****	*****	*****	*****	2.19	*****	-0.25	*****	0.87 (0.57, 1.32)	0.501
ARBs (183-day prior,14-day gap)	49,079	*****	*****	*****	*****	2.45	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	49,082	*****	*****	*****	*****	2.49	*****	-1.6	*****	0.60 (0.31, 1.19)	0.146
ARBs (183-day prior,14-day gap)	336,258	*****	*****	*****	*****	4.08	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	49,079	*****	*****	*****	*****	2.27	*****	-1.13	*****	0.67 (0.27, 1.63)	0.374
ARBs (183-day prior,14-day gap)	49,079	*****	*****	*****	*****	3.4	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	49,079	*****	*****	*****	*****	2.49	*****	-1.6	*****	0.61 (0.27, 1.37)	0.229
ARBs (183-day prior,14-day gap)	49,079	*****	*****	*****	*****	4.08	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	39,070	*****	*****	*****	*****	3.01	*****	0.02	*****	1.01 (0.49, 2.11)	0.969
ARBs (183-day prior,14-day gap)	315,501	*****	*****	*****	*****	2.99	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	36,476	*****	*****	*****	*****	3.58	*****	-1.34	*****	0.73 (0.29, 1.81)	0.493
ARBs (183-day prior,14-day gap)	36,476	*****	*****	*****	*****	4.92	*****				

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183, -1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	39,069	*****	*****	*****	*****	3.01	*****	-1.5	*****	0.67 (0.28, 1.58)	0.362
ARBs (183-day prior,14-day gap)	45,840	*****	*****	*****	*****	4.51	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	26,448	*****	*****	*****	*****	3.05	*****	0.82	*****	1.42 (0.60, 3.33)	0.424
ARBs (183-day prior,14-day gap)	242,928	*****	*****	*****	*****	2.23	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	19,220	*****	*****	*****	*****	2.97	*****	2.97	*****	-	-
ARBs (183-day prior,14-day gap)	19,220	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	26,448	*****	*****	*****	*****	3.05	*****	3.05	*****	-	-
ARBs (183-day prior,14-day gap)	35,641	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	21,350	*****	*****	*****	*****	2.24	*****	0.24	*****	1.11 (0.56, 2.22)	0.759
ARBs (183-day prior,14-day gap)	213,786	*****	*****	*****	*****	2	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	13,539	*****	*****	*****	*****	2.61	*****	0.52	*****	1.25 (0.34, 4.65)	0.739
ARBs (183-day prior,14-day gap)	13,539	*****	*****	*****	*****	2.09	*****				

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183, -1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	21,350	*****	*****	*****	*****	2.24	*****	-0.43	*****	0.83 (0.36, 1.90)	0.663
ARBs (183-day prior,14-day gap)	31,152	*****	*****	*****	*****	2.67	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	13,089	*****	*****	*****	*****	1.13	*****	-0.72	*****	0.62 (0.19, 2.00)	0.425
ARBs (183-day prior,14-day gap)	129,786	*****	*****	*****	*****	1.85	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	4,924	*****	*****	*****	*****	3.63	*****	3.63	*****	-	-
ARBs (183-day prior,14-day gap)	4,924	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	13,089	*****	*****	*****	*****	1.13	*****	0.05	*****	1.05 (0.24, 4.72)	0.946
ARBs (183-day prior,14-day gap)	18,422	*****	*****	*****	*****	1.08	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	8,986	*****	*****	*****	*****	1.02	*****	-0.39	*****	0.75 (0.18, 3.13)	0.69
ARBs (183-day prior,14-day gap)	92,446	*****	*****	*****	*****	1.41	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,353	*****	*****	*****	*****	2.26	*****	2.26	*****	-	-
ARBs (183-day prior,14-day gap)	2,353	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,986	*****	*****	*****	*****	1.02	*****	-0.43	*****	0.71 (0.13, 3.88)	0.694
ARBs (183-day prior,14-day gap)	12,645	*****	*****	*****	*****	1.45	*****				

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183, -1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Angioedema (-183, -1)											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	58	*****	*****	*****	*****	333.15	*****	61.51	*****	1.13 (0.49, 2.58)	0.778
ARBs (183-day prior,14-day gap)	825	*****	*****	*****	*****	271.63	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	55	*****	*****	*****	*****	304.57	*****	-203.05	*****	0.60 (0.14, 2.51)	0.484
ARBs (183-day prior,14-day gap)	55	*****	*****	*****	*****	507.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	55	*****	*****	*****	*****	296.21	*****	13.27	*****	0.76 (0.21, 2.70)	0.672
ARBs (183-day prior,14-day gap)	55	*****	*****	*****	*****	282.94	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	58	*****	*****	*****	*****	1,295.34	*****	491.05	*****	1.51 (0.60, 3.80)	0.378
ARBs (183-day prior,14-day gap)	825	*****	*****	*****	*****	804.29	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	55	*****	*****	*****	*****	847.46	*****	-282.49	*****	0.75 (0.17, 3.35)	0.706
ARBs (183-day prior,14-day gap)	55	*****	*****	*****	*****	1,129.94	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	55	*****	*****	*****	*****	1,061.01	*****	110.89	*****	1.07 (0.27, 4.30)	0.919
ARBs (183-day prior,14-day gap)	55	*****	*****	*****	*****	950.12	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	41	*****	*****	*****	*****	0	*****	-194.97	*****	-	-
ARBs (183-day prior,14-day gap)	725	*****	*****	*****	*****	194.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	36	*****	*****	*****	*****	0	*****	-390.63	*****	-	-
ARBs (183-day prior,14-day gap)	36	*****	*****	*****	*****	390.63	*****				

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183, -1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	39	*****	*****	*****	*****	0	*****	-262.47	*****	-	-
ARBs (183-day prior,14-day gap)	50	*****	*****	*****	*****	262.47	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	28	*****	*****	*****	*****	460.83	*****	184.79	*****	1.52 (0.20, 11.78)	0.69
ARBs (183-day prior,14-day gap)	522	*****	*****	*****	*****	276.04	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	22	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior,14-day gap)	22	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	29	*****	*****	*****	*****	432.9	*****	432.9	*****	-	-
ARBs (183-day prior,14-day gap)	42	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	24	*****	*****	*****	*****	0	*****	-118.47	*****	-	-
ARBs (183-day prior,14-day gap)	449	*****	*****	*****	*****	118.47	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	21	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior,14-day gap)	21	*****	*****	*****	*****	0	*****				

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Prior Angioedema (-183, -1) and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	26	*****	*****	*****	*****	0	*****	-145.56	*****	-	-
ARBs (183-day prior,14-day gap)	36	*****	*****	*****	*****	145.56	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	13	*****	*****	*****	*****	0	*****	-106.48	*****	-	-
ARBs (183-day prior,14-day gap)	286	*****	*****	*****	*****	106.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior,14-day gap)	*****	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	16	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior,14-day gap)	23	*****	*****	*****	*****	0	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	-66.89	*****	-	-
ARBs (183-day prior,14-day gap)	197	*****	*****	*****	*****	66.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior,14-day gap)	*****	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	11	*****	*****	*****	*****	0	*****	-243.31	*****	-	-
ARBs (183-day prior,14-day gap)	17	*****	*****	*****	*****	243.31	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 17. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (ever, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	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% Confidence Interval)	Wald P-Value	
No Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	48,390	*****	*****	*****	*****	1.92	*****	-0.11	*****	0.91 (0.63, 1.32)	0.627
ARBs (14-day gap)	329,726	*****	*****	*****	*****	2.03	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	48,383	*****	*****	*****	*****	2.47	*****	0.49	*****	1.25 (0.69, 2.25)	0.457
ARBs (14-day gap)	48,383	*****	*****	*****	*****	1.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	48,383	*****	*****	*****	*****	1.92	*****	-0.02	*****	0.96 (0.60, 1.51)	0.845
ARBs (14-day gap)	48,383	*****	*****	*****	*****	1.94	*****				
Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	750	*****	*****	*****	*****	45.4	*****	-2.55	*****	0.83 (0.45, 1.54)	0.558
ARBs (14-day gap)	7,357	*****	*****	*****	*****	47.94	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	744	*****	*****	*****	*****	64.88	*****	12.98	*****	1.25 (0.49, 3.17)	0.638
ARBs (14-day gap)	744	*****	*****	*****	*****	51.9	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	744	*****	*****	*****	*****	41.87	*****	9.65	*****	1.16 (0.49, 2.74)	0.739
ARBs (14-day gap)	744	*****	*****	*****	*****	32.22	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 18. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Serious Allergies

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Years at Risk	Average Person Years at Risk	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% Confidence Interval)	Wald P-Value	
No Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	42,674	*****	*****	*****	*****	2.28	*****	-0.3	*****	0.84 (0.59, 1.20)	0.332
ARBs (14-day gap)	282,648	*****	*****	*****	*****	2.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	42,666	*****	*****	*****	*****	2.76	*****	0	*****	1.00 (0.57, 1.74)	1
ARBs (14-day gap)	42,666	*****	*****	*****	*****	2.76	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	42,666	*****	*****	*****	*****	2.28	*****	-0.21	*****	0.88 (0.57, 1.37)	0.57
ARBs (14-day gap)	42,666	*****	*****	*****	*****	2.49	*****				
Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	6,466	*****	*****	*****	*****	4.48	*****	-1.01	*****	0.76 (0.39, 1.50)	0.427
ARBs (14-day gap)	54,435	*****	*****	*****	*****	5.5	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	6,436	*****	*****	*****	*****	4.22	*****	-0.84	*****	0.83 (0.25, 2.73)	0.763
ARBs (14-day gap)	6,436	*****	*****	*****	*****	5.06	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	6,436	*****	*****	*****	*****	4.51	*****	1.05	*****	1.25 (0.49, 3.15)	0.64
ARBs (14-day gap)	6,436	*****	*****	*****	*****	3.46	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 19. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²	
Sex: Male												
Overall												
Site-Adjusted Analysis												
SV (14-day gap, history of ARBs (-183, -1))	29,914	*****	*****	*****	*****	1.92	*****		-0.98	*****	0.63 (0.40, 1.00)	0.05
ARBs (14-day gap)	149,212	*****	*****	*****	*****	2.9	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ARBs (-183, -1))	29,883	*****	*****	*****	*****	2.72	*****		-0.32	*****	0.89 (0.47, 1.72)	0.739
ARBs (14-day gap)	29,883	*****	*****	*****	*****	3.04	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ARBs (-183, -1))	29,883	*****	*****	*****	*****	1.92	*****		-0.81	*****	0.67 (0.39, 1.16)	0.154
ARBs (14-day gap)	29,883	*****	*****	*****	*****	2.73	*****					
0 - 30 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ARBs (-183, -1))	29,914	*****	*****	*****	*****	4.07	*****		-0.96	*****	0.79 (0.39, 1.58)	0.501
ARBs (14-day gap)	149,212	*****	*****	*****	*****	5.02	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ARBs (-183, -1))	29,883	*****	*****	*****	*****	4.19	*****		0	*****	1.00 (0.40, 2.52)	1
ARBs (14-day gap)	29,883	*****	*****	*****	*****	4.19	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ARBs (-183, -1))	29,883	*****	*****	*****	*****	4.07	*****		-0.13	*****	0.96 (0.39, 2.35)	0.922
ARBs (14-day gap)	29,883	*****	*****	*****	*****	4.2	*****					

Table 19. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
31 - 60 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	23,979	*****	*****	*****	*****	1.22	*****	-1.66	*****	0.42 (0.10, 1.77)	0.239
ARBs (14-day gap)	139,746	*****	*****	*****	*****	2.88	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	22,255	*****	*****	*****	*****	1.46	*****	-2.2	*****	0.40 (0.08, 2.06)	0.273
ARBs (14-day gap)	22,255	*****	*****	*****	*****	3.66	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	23,959	*****	*****	*****	*****	1.22	*****	-2.75	*****	0.31 (0.07, 1.47)	0.142
ARBs (14-day gap)	27,741	*****	*****	*****	*****	3.97	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	16,323	*****	*****	*****	*****	3.29	*****	0.88	*****	1.42 (0.48, 4.15)	0.526
ARBs (14-day gap)	107,317	*****	*****	*****	*****	2.41	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	11,742	*****	*****	*****	*****	2.44	*****	2.44	*****	-	-
ARBs (14-day gap)	11,742	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	16,314	*****	*****	*****	*****	3.29	*****	3.29	*****	-	-
ARBs (14-day gap)	21,548	*****	*****	*****	*****	0	*****				

Table 19. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²	
91 - 180 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ARBs (-183, -1))	13,186	*****	*****	*****	*****	1.61	*****		-1.16	*****	0.57 (0.20, 1.57)	0.275
ARBs (14-day gap)	94,188	*****	*****	*****	*****	2.77	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ARBs (-183, -1))	8,232	*****	*****	*****	*****	2.61	*****		-0.87	*****	0.75 (0.17, 3.35)	0.706
ARBs (14-day gap)	8,232	*****	*****	*****	*****	3.47	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ARBs (-183, -1))	13,178	*****	*****	*****	*****	1.61	*****		-2.28	*****	0.40 (0.13, 1.23)	0.11
ARBs (14-day gap)	18,720	*****	*****	*****	*****	3.89	*****					
181 - 270 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ARBs (-183, -1))	8,155	*****	*****	*****	*****	0.6	*****		-1.23	*****	0.34 (0.05, 2.55)	0.296
ARBs (14-day gap)	56,397	*****	*****	*****	*****	1.83	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ARBs (-183, -1))	2,967	*****	*****	*****	*****	2	*****		0	*****	1.00 (0.06, 15.99)	1
ARBs (14-day gap)	2,967	*****	*****	*****	*****	2	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ARBs (-183, -1))	8,149	*****	*****	*****	*****	0.6	*****		-0.77	*****	0.42 (0.04, 4.08)	0.458
ARBs (14-day gap)	10,875	*****	*****	*****	*****	1.38	*****					

Table 19. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	5,618	*****	*****	*****	*****	0	*****	-2.15	*****	-	-
ARBs (14-day gap)	39,949	*****	*****	*****	*****	2.15	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	1,428	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	1,428	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	5,616	*****	*****	*****	*****	0	*****	-1.24	*****	-	-
ARBs (14-day gap)	7,452	*****	*****	*****	*****	1.24	*****				
Sex: Female											
Overall											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	19,226	*****	*****	*****	*****	3.56	*****	0.45	*****	1.07 (0.70, 1.64)	0.749
ARBs (14-day gap)	187,871	*****	*****	*****	*****	3.11	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	19,218	*****	*****	*****	*****	4.52	*****	0.25	*****	1.06 (0.55, 2.05)	0.866
ARBs (14-day gap)	19,218	*****	*****	*****	*****	4.27	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	19,218	*****	*****	*****	*****	3.56	*****	0.88	*****	1.27 (0.71, 2.27)	0.413
ARBs (14-day gap)	19,218	*****	*****	*****	*****	2.68	*****				

Table 19. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²	
			Person Days at Risk	Person Years at Risk								
0 - 30 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ARBs (-183, -1))	19,226	*****	*****	*****	*****	3.54	*****		-3.17	*****	0.52 (0.21, 1.28)	0.156
ARBs (14-day gap)	187,871	*****	*****	*****	*****	6.71	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ARBs (-183, -1))	19,218	*****	*****	*****	*****	2.91	*****		-3.64	*****	0.44 (0.14, 1.44)	0.177
ARBs (14-day gap)	19,218	*****	*****	*****	*****	6.55	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ARBs (-183, -1))	19,218	*****	*****	*****	*****	3.54	*****		-2.97	*****	0.54 (0.18, 1.57)	0.256
ARBs (14-day gap)	19,218	*****	*****	*****	*****	6.51	*****					
31 - 60 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ARBs (-183, -1))	15,132	*****	*****	*****	*****	5.85	*****		2.01	*****	1.53 (0.65, 3.57)	0.328
ARBs (14-day gap)	176,478	*****	*****	*****	*****	3.84	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ARBs (-183, -1))	14,102	*****	*****	*****	*****	7	*****		1.17	*****	1.20 (0.37, 3.93)	0.763
ARBs (14-day gap)	14,102	*****	*****	*****	*****	5.83	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ARBs (-183, -1))	15,128	*****	*****	*****	*****	5.86	*****		1.22	*****	1.26 (0.41, 3.91)	0.688
ARBs (14-day gap)	17,918	*****	*****	*****	*****	4.63	*****					

Table 19. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk							
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	10,153	*****	*****	*****	*****	3.97	*****	0.85	*****	1.31 (0.40, 4.26)	0.658
ARBs (14-day gap)	136,128	*****	*****	*****	*****	3.13	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	7,322	*****	*****	*****	*****	5.83	*****	5.83	*****	-	-
ARBs (14-day gap)	7,322	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	10,151	*****	*****	*****	*****	3.97	*****	3.97	*****	-	-
ARBs (14-day gap)	13,812	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	8,188	*****	*****	*****	*****	3.25	*****	1.39	*****	1.78 (0.70, 4.52)	0.222
ARBs (14-day gap)	120,042	*****	*****	*****	*****	1.86	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	5,187	*****	*****	*****	*****	4.04	*****	1.35	*****	1.50 (0.25, 8.98)	0.657
ARBs (14-day gap)	5,187	*****	*****	*****	*****	2.69	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	8,186	*****	*****	*****	*****	3.25	*****	1.88	*****	2.34 (0.56, 9.82)	0.244
ARBs (14-day gap)	12,064	*****	*****	*****	*****	1.37	*****				

Table 19. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 183-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	4,946	*****	*****	*****	*****	2	*****	-0.25	*****	0.90 (0.22, 3.76)	0.887
ARBs (14-day gap)	73,672	*****	*****	*****	*****	2.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	1,909	*****	*****	*****	*****	3.11	*****	0	*****	1.00 (0.06, 15.99)	1
ARBs (14-day gap)	1,909	*****	*****	*****	*****	3.11	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	4,945	*****	*****	*****	*****	2	*****	0.61	*****	1.53 (0.22, 10.90)	0.67
ARBs (14-day gap)	7,169	*****	*****	*****	*****	1.39	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	3,377	*****	*****	*****	*****	2.73	*****	1.62	*****	2.69 (0.61, 11.92)	0.194
ARBs (14-day gap)	52,691	*****	*****	*****	*****	1.11	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	920	*****	*****	*****	*****	5.82	*****	5.82	*****	-	-
ARBs (14-day gap)	920	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	3,377	*****	*****	*****	*****	2.72	*****	0.87	*****	1.58 (0.22, 11.22)	0.649
ARBs (14-day gap)	4,919	*****	*****	*****	*****	1.86	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 20. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 18-44 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	1,164	*****	*****	*****	*****	0	*****	-7.89	*****	-	-
ARBs (14-day gap)	8,502	*****	*****	*****	*****	7.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	1,154	*****	*****	*****	*****	0	*****	-5.39	*****	-	-
ARBs (14-day gap)	1,154	*****	*****	*****	*****	5.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	1,154	*****	*****	*****	*****	0	*****	-2.66	*****	-	-
ARBs (14-day gap)	1,154	*****	*****	*****	*****	2.66	*****				
Age Group: 45-54 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	2,653	*****	*****	*****	*****	3.55	*****	-0.77	*****	0.86 (0.26, 2.82)	0.799
ARBs (14-day gap)	18,293	*****	*****	*****	*****	4.32	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	2,641	*****	*****	*****	*****	4.24	*****	-4.24	*****	0.50 (0.09, 2.73)	0.423
ARBs (14-day gap)	2,641	*****	*****	*****	*****	8.49	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	2,641	*****	*****	*****	*****	3.56	*****	-2.53	*****	0.61 (0.15, 2.42)	0.479
ARBs (14-day gap)	2,641	*****	*****	*****	*****	6.09	*****				

Table 20. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 55-64 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	5,990	*****	*****	*****	*****	5.14	*****	1.14	*****	1.25 (0.64, 2.45)	0.506
ARBs (14-day gap)	40,547	*****	*****	*****	*****	4	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	5,945	*****	*****	*****	*****	7.18	*****	3.59	*****	2.00 (0.60, 6.64)	0.258
ARBs (14-day gap)	5,945	*****	*****	*****	*****	3.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	5,945	*****	*****	*****	*****	5.17	*****	3.47	*****	2.89 (0.91, 9.25)	0.073
ARBs (14-day gap)	5,945	*****	*****	*****	*****	1.69	*****				
Age Group: 65+ Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	39,333	*****	*****	*****	*****	2.18	*****	-0.52	*****	0.76 (0.52, 1.10)	0.146
ARBs (14-day gap)	269,741	*****	*****	*****	*****	2.71	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	39,269	*****	*****	*****	*****	2.94	*****	0	*****	1.00 (0.57, 1.74)	1
ARBs (14-day gap)	39,269	*****	*****	*****	*****	2.94	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	39,269	*****	*****	*****	*****	2.19	*****	-0.47	*****	0.78 (0.49, 1.23)	0.29
ARBs (14-day gap)	39,269	*****	*****	*****	*****	2.65	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 18-44											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,164	*****	*****	*****	*****	0	*****	-7.89	*****	-	-
ARBs (183-day prior, 14-day gap)	8,502	*****	*****	*****	*****	7.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	0	*****	-5.39	*****	-	-
ARBs (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	5.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	0	*****	-2.66	*****	-	-
ARBs (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	2.66	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,164	*****	*****	*****	*****	0	*****	-5.9	*****	-	-
ARBs (183-day prior, 14-day gap)	8,502	*****	*****	*****	*****	5.9	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,154	*****	*****	*****	*****	0	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	904	*****	*****	*****	*****	0	*****	-7.65	*****	-	-
ARBs (183-day prior, 14-day gap)	7,923	*****	*****	*****	*****	7.65	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	811	*****	*****	*****	*****	0	*****	-21.5	*****	-	-
ARBs (183-day prior, 14-day gap)	811	*****	*****	*****	*****	21.5	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	899	*****	*****	*****	*****	0	*****	-14.46	*****	-	-
ARBs (183-day prior, 14-day gap)	1,034	*****	*****	*****	*****	14.46	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	570	*****	*****	*****	*****	0	*****	-5.33	*****	-	-
ARBs (183-day prior, 14-day gap)	5,003	*****	*****	*****	*****	5.33	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	327	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	327	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	567	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	654	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	446	*****	*****	*****	*****	0	*****	-16.53	*****	-	-
ARBs (183-day prior, 14-day gap)	4,048	*****	*****	*****	*****	16.53	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	197	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	197	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	446	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	499	*****	*****	*****	*****	0	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	264	*****	*****	*****	*****	0	*****	-5.1	*****	-	-
ARBs (183-day prior, 14-day gap)	1,994	*****	*****	*****	*****	5.1	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk		Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	58	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	58	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	267	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	256	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	192	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,316	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	33	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	33	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	193	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	170	*****	*****	*****	*****	0	*****	0	*****	-	-
Age Group: 45-54											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,653	*****	*****	*****	*****	3.55	*****	-0.77	*****	0.86 (0.26, 2.82)	0.799
ARBs (183-day prior, 14-day gap)	18,293	*****	*****	*****	*****	4.32	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	4.24	*****	-4.24	*****	0.50 (0.09, 2.73)	0.423
ARBs (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	8.49	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	3.56	*****	-2.53	*****	0.61 (0.15, 2.42)	0.479
ARBs (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	6.09	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,653	*****	*****	*****	*****	0	*****	-10.27	*****	-	-
ARBs (183-day prior, 14-day gap)	18,293	*****	*****	*****	*****	10.27	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	0	*****	-10.78	*****	-	-
ARBs (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	10.78	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	0	*****	-9.53	*****	-	-
ARBs (183-day prior, 14-day gap)	2,641	*****	*****	*****	*****	9.53	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,051	*****	*****	*****	*****	0	*****	-4.29	*****	-	-
ARBs (183-day prior, 14-day gap)	17,081	*****	*****	*****	*****	4.29	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,882	*****	*****	*****	*****	0	*****	-18.36	*****	-	-
ARBs (183-day prior, 14-day gap)	1,882	*****	*****	*****	*****	18.36	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,042	*****	*****	*****	*****	0	*****	-11.86	*****	-	-
ARBs (183-day prior, 14-day gap)	2,436	*****	*****	*****	*****	11.86	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,326	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	11,640	*****	*****	*****	*****	0	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	848	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	848	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,321	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,705	*****	*****	*****	*****	0	*****	0	*****	-	-
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,040	*****	*****	*****	*****	10.1	*****	6.5	*****	2.90 (0.58, 14.51)	0.196
ARBs (183-day prior, 14-day gap)	9,733	*****	*****	*****	*****	3.6	*****	6.5	*****	2.90 (0.58, 14.51)	0.196
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	549	*****	*****	*****	*****	13.32	*****	13.32	*****	-	-
ARBs (183-day prior, 14-day gap)	549	*****	*****	*****	*****	0	*****	13.32	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,039	*****	*****	*****	*****	10.11	*****	5.88	*****	2.46 (0.22, 27.20)	0.463
ARBs (183-day prior, 14-day gap)	1,398	*****	*****	*****	*****	4.23	*****	5.88	*****	2.46 (0.22, 27.20)	0.463
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	637	*****	*****	*****	*****	7.75	*****	5.81	*****	4.09 (0.36, 46.23)	0.255
ARBs (183-day prior, 14-day gap)	5,198	*****	*****	*****	*****	1.94	*****	5.81	*****	4.09 (0.36, 46.23)	0.255

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	184	*****	*****	*****	*****	31.69	*****	31.69	*****	-	-
ARBs (183-day prior, 14-day gap)	184	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	638	*****	*****	*****	*****	7.74	*****	7.74	*****	-	-
ARBs (183-day prior, 14-day gap)	723	*****	*****	*****	*****	0	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	435	*****	*****	*****	*****	0	*****	-2.69	*****	-	-
ARBs (183-day prior, 14-day gap)	3,436	*****	*****	*****	*****	2.69	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	88	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	88	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	435	*****	*****	*****	*****	0	*****	-9.96	*****	-	-
ARBs (183-day prior, 14-day gap)	477	*****	*****	*****	*****	9.96	*****				
Age Group: 55-64											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	5,990	*****	*****	*****	*****	5.14	*****	1.14	*****	1.25 (0.64, 2.45)	0.506
ARBs (183-day prior, 14-day gap)	40,547	*****	*****	*****	*****	4	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	7.18	*****	3.59	*****	2.00 (0.60, 6.64)	0.258
ARBs (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	3.59	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	5.17	*****	3.47	*****	2.89 (0.91, 9.25)	0.073
ARBs (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	1.69	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	5,990	*****	*****	*****	*****	9.23	*****	1.22	*****	1.07 (0.37, 3.08)	0.901
ARBs (183-day prior, 14-day gap)	40,547	*****	*****	*****	*****	8.02	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	9.61	*****	4.81	*****	2.00 (0.37, 10.92)	0.423
ARBs (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	4.81	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	9.3	*****	5.05	*****	2.10 (0.38, 11.44)	0.393
ARBs (183-day prior, 14-day gap)	5,945	*****	*****	*****	*****	4.24	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	4,618	*****	*****	*****	*****	6.43	*****	4.18	*****	2.92 (0.58, 14.60)	0.193
ARBs (183-day prior, 14-day gap)	37,952	*****	*****	*****	*****	2.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	4,220	*****	*****	*****	*****	8.01	*****	4.01	*****	2.00 (0.18, 22.06)	0.571
ARBs (183-day prior, 14-day gap)	4,220	*****	*****	*****	*****	4.01	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	4,594	*****	*****	*****	*****	6.47	*****	3.87	*****	2.34 (0.21, 25.82)	0.487
ARBs (183-day prior, 14-day gap)	5,466	*****	*****	*****	*****	2.6	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	3,044	*****	*****	*****	*****	8.87	*****	6.48	*****	3.86 (0.74, 20.09)	0.109
ARBs (183-day prior, 14-day gap)	27,412	*****	*****	*****	*****	2.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,036	*****	*****	*****	*****	7.12	*****	7.12	*****	-	-
ARBs (183-day prior, 14-day gap)	2,036	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	3,028	*****	*****	*****	*****	8.91	*****	8.91	*****	-	-
ARBs (183-day prior, 14-day gap)	3,974	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,406	*****	*****	*****	*****	2.2	*****	-1.19	*****	0.65 (0.09, 5.00)	0.682
ARBs (183-day prior, 14-day gap)	23,326	*****	*****	*****	*****	3.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,367	*****	*****	*****	*****	5.16	*****	0	*****	1.00 (0.06, 15.99)	1
ARBs (183-day prior, 14-day gap)	1,367	*****	*****	*****	*****	5.16	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,394	*****	*****	*****	*****	2.21	*****	0.5	*****	1.15 (0.07, 18.54)	0.922
ARBs (183-day prior, 14-day gap)	3,331	*****	*****	*****	*****	1.71	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,482	*****	*****	*****	*****	0	*****	-3.39	*****	-	-
ARBs (183-day prior, 14-day gap)	13,307	*****	*****	*****	*****	3.39	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	482	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	482	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,479	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,832	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,012	*****	*****	*****	*****	4.54	*****	1	*****	1.57 (0.19, 12.73)	0.675
ARBs (183-day prior, 14-day gap)	9,049	*****	*****	*****	*****	3.54	*****	1	*****	1.57 (0.19, 12.73)	0.675
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	214	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	214	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,010	*****	*****	*****	*****	4.56	*****	4.56	*****	-	-
ARBs (183-day prior, 14-day gap)	1,204	*****	*****	*****	*****	0	*****	4.56	*****	-	-
Age Group: 65+											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	39,333	*****	*****	*****	*****	2.18	*****	-0.52	*****	0.76 (0.52, 1.10)	0.146
ARBs (183-day prior, 14-day gap)	269,741	*****	*****	*****	*****	2.71	*****	-0.52	*****	0.76 (0.52, 1.10)	0.146
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	2.94	*****	0	*****	1.00 (0.57, 1.74)	1
ARBs (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	2.94	*****	0	*****	1.00 (0.57, 1.74)	1

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	per 1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	2.19	*****	-0.47	*****	0.78 (0.49, 1.23)	0.29
ARBs (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	2.65	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	39,333	*****	*****	*****	*****	3.43	*****	-1.93	*****	0.63 (0.33, 1.20)	0.161
ARBs (183-day prior, 14-day gap)	269,741	*****	*****	*****	*****	5.37	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	3.18	*****	-1.77	*****	0.64 (0.28, 1.49)	0.301
ARBs (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	4.95	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	3.44	*****	-1.99	*****	0.63 (0.29, 1.38)	0.246
ARBs (183-day prior, 14-day gap)	39,269	*****	*****	*****	*****	5.42	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	31,540	*****	*****	*****	*****	2.78	*****	-0.62	*****	0.82 (0.35, 1.89)	0.639
ARBs (183-day prior, 14-day gap)	253,270	*****	*****	*****	*****	3.41	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	29,335	*****	*****	*****	*****	3.29	*****	-0.55	*****	0.86 (0.29, 2.55)	0.782
ARBs (183-day prior, 14-day gap)	29,335	*****	*****	*****	*****	3.84	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	31,491	*****	*****	*****	*****	2.79	*****	-1.68	*****	0.64 (0.24, 1.70)	0.367
ARBs (183-day prior, 14-day gap)	36,608	*****	*****	*****	*****	4.47	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	21,538	*****	*****	*****	*****	3.11	*****	0.15	*****	1.07 (0.43, 2.70)	0.882
ARBs (183-day prior, 14-day gap)	199,393	*****	*****	*****	*****	2.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	15,962	*****	*****	*****	*****	2.67	*****	2.67	*****	-	-
ARBs (183-day prior, 14-day gap)	15,962	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	21,507	*****	*****	*****	*****	3.12	*****	3.12	*****	-	-
ARBs (183-day prior, 14-day gap)	28,996	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	17,483	*****	*****	*****	*****	1.82	*****	0.07	*****	1.05 (0.45, 2.43)	0.911
ARBs (183-day prior, 14-day gap)	177,131	*****	*****	*****	*****	1.75	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	11,400	*****	*****	*****	*****	2.46	*****	0.61	*****	1.33 (0.30, 5.96)	0.706
ARBs (183-day prior, 14-day gap)	11,400	*****	*****	*****	*****	1.84	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	17,460	*****	*****	*****	*****	1.83	*****	-0.33	*****	0.84 (0.30, 2.31)	0.733
ARBs (183-day prior, 14-day gap)	25,575	*****	*****	*****	*****	2.16	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	10,720	*****	*****	*****	*****	0.92	*****	-0.95	*****	0.51 (0.12, 2.09)	0.346
ARBs (183-day prior, 14-day gap)	109,576	*****	*****	*****	*****	1.87	*****				

Table 21. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Age Group, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	4,259	*****	*****	*****	*****	2.79	*****	1.39	*****	2.00 (0.18, 22.06)	0.571
ARBs (183-day prior, 14-day gap)	4,259	*****	*****	*****	*****	1.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	10,705	*****	*****	*****	*****	0.92	*****	-0.71	*****	0.57 (0.11, 2.93)	0.499
ARBs (183-day prior, 14-day gap)	15,297	*****	*****	*****	*****	1.63	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	7,356	*****	*****	*****	*****	0.62	*****	-0.69	*****	0.48 (0.07, 3.58)	0.477
ARBs (183-day prior, 14-day gap)	78,843	*****	*****	*****	*****	1.31	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,066	*****	*****	*****	*****	2.58	*****	2.58	*****	-	-
ARBs (183-day prior, 14-day gap)	2,066	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	7,349	*****	*****	*****	*****	0.62	*****	-1.11	*****	0.37 (0.04, 3.32)	0.375
ARBs (183-day prior, 14-day gap)	10,577	*****	*****	*****	*****	1.73	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 22. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Unknown											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	8,082	*****	*****	*****	*****	1.84	*****	-0.67	*****	0.71 (0.28, 1.78)	0.468
ARBs (14-day gap)	47,793	*****	*****	*****	*****	2.52	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	8,026	*****	*****	*****	*****	1.92	*****	0.64	*****	1.50 (0.25, 8.98)	0.657
ARBs (14-day gap)	8,026	*****	*****	*****	*****	1.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	8,026	*****	*****	*****	*****	1.85	*****	-0.21	*****	0.87 (0.27, 2.74)	0.807
ARBs (14-day gap)	8,026	*****	*****	*****	*****	2.07	*****				
Race: American Indian											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	133	*****	*****	*****	*****	0	*****	-1.36	*****	-	-
ARBs (14-day gap)	1,948	*****	*****	*****	*****	1.36	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	131	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	131	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	131	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	131	*****	*****	*****	*****	0	*****				

Table 22. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Asian											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	1,070	*****	*****	*****	*****	0	*****	-0.81	*****	-	-
ARBs (14-day gap)	7,811	*****	*****	*****	*****	0.81	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	1,026	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	1,026	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	1,026	*****	*****	*****	*****	0	*****	-2.15	*****	-	-
ARBs (14-day gap)	1,026	*****	*****	*****	*****	2.15	*****				
Race: Black											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	6,989	*****	*****	*****	*****	4.36	*****	-2.45	*****	0.60 (0.31, 1.18)	0.139
ARBs (14-day gap)	55,801	*****	*****	*****	*****	6.8	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	6,967	*****	*****	*****	*****	4.11	*****	-4.11	*****	0.50 (0.17, 1.46)	0.206
ARBs (14-day gap)	6,967	*****	*****	*****	*****	8.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	6,967	*****	*****	*****	*****	4.36	*****	-1.17	*****	0.74 (0.32, 1.70)	0.482
ARBs (14-day gap)	6,967	*****	*****	*****	*****	5.53	*****				

Table 22. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Pacific Islander											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	61	*****	*****	*****	*****	0	*****	-8.97	*****	-	-
ARBs (14-day gap)	478	*****	*****	*****	*****	8.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	50	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	50	*****	*****	*****	*****	0	*****				
Race: White											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	32,805	*****	*****	*****	*****	2.48	*****	0.07	*****	0.97 (0.66, 1.42)	0.858
ARBs (14-day gap)	223,252	*****	*****	*****	*****	2.4	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	32,796	*****	*****	*****	*****	3.61	*****	0	*****	1.00 (0.58, 1.72)	1
ARBs (14-day gap)	32,796	*****	*****	*****	*****	3.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	32,796	*****	*****	*****	*****	2.48	*****	-0.16	*****	0.89 (0.55, 1.44)	0.647
ARBs (14-day gap)	32,796	*****	*****	*****	*****	2.63	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Incidence Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	Risk per 1,000 New Users				
Race: Unknown											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	8,082	*****	*****	*****	*****	1.84	*****	-0.67	*****	0.71 (0.28, 1.78)	0.468
ARBs (183-day prior, 14-day gap)	47,793	*****	*****	*****	*****	2.52	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	1.92	*****	0.64	*****	1.50 (0.25, 8.98)	0.657
ARBs (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	1.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	1.85	*****	-0.21	*****	0.87 (0.27, 2.74)	0.807
ARBs (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	2.07	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	8,082	*****	*****	*****	*****	5.14	*****	1.73	*****	1.43 (0.41, 5.01)	0.579
ARBs (183-day prior, 14-day gap)	47,793	*****	*****	*****	*****	3.41	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	5.35	*****	5.35	*****	-	-
ARBs (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	5.17	*****	5.17	*****	-	-
ARBs (183-day prior, 14-day gap)	8,026	*****	*****	*****	*****	0	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	6,161	*****	*****	*****	*****	0	*****	-2.52	*****	-	-
ARBs (183-day prior, 14-day gap)	44,551	*****	*****	*****	*****	2.52	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	5,627	*****	*****	*****	*****	0	*****	-2.93	*****	-	-
ARBs (183-day prior, 14-day gap)	5,627	*****	*****	*****	*****	2.93	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	6,121	*****	*****	*****	*****	0	*****	-5.66	*****	-	-
ARBs (183-day prior, 14-day gap)	7,377	*****	*****	*****	*****	5.66	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	4,181	*****	*****	*****	*****	3.22	*****	1.65	*****	2.18 (0.24, 19.59)	0.488
ARBs (183-day prior, 14-day gap)	33,264	*****	*****	*****	*****	1.57	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,880	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	2,880	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	4,154	*****	*****	*****	*****	3.24	*****	3.24	*****	-	-
ARBs (183-day prior, 14-day gap)	5,599	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	3,352	*****	*****	*****	*****	1.54	*****	-1.75	*****	0.46 (0.06, 3.47)	0.453
ARBs (183-day prior, 14-day gap)	28,534	*****	*****	*****	*****	3.29	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,957	*****	*****	*****	*****	0	*****	-3.59	*****	-	-
ARBs (183-day prior, 14-day gap)	1,957	*****	*****	*****	*****	3.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	3,332	*****	*****	*****	*****	1.55	*****	-1.98	*****	0.43 (0.05, 4.18)	0.47
ARBs (183-day prior, 14-day gap)	4,741	*****	*****	*****	*****	3.52	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,124	*****	*****	*****	*****	0	*****	-2.06	*****	-	-
ARBs (183-day prior, 14-day gap)	16,765	*****	*****	*****	*****	2.06	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	719	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	719	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,117	*****	*****	*****	*****	0	*****	-1.85	*****	-	-
ARBs (183-day prior, 14-day gap)	2,716	*****	*****	*****	*****	1.85	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,453	*****	*****	*****	*****	0	*****	-1.16	*****	-	-
ARBs (183-day prior, 14-day gap)	11,720	*****	*****	*****	*****	1.16	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	333	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	333	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,449	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,839	*****	*****	*****	*****	0	*****				
Race: American Indian											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	133	*****	*****	*****	*****	0	*****	-1.36	*****	-	-
ARBs (183-day prior, 14-day gap)	1,948	*****	*****	*****	*****	1.36	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	133	*****	*****	*****	*****	0	*****	-6.38	*****	-	-
ARBs (183-day prior, 14-day gap)	1,948	*****	*****	*****	*****	6.38	*****	-6.38	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	101	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,839	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	97	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	97	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	101	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	122	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	62	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,233	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	49	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	49	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	63	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	91	*****	*****	*****	*****	0	*****	0	*****	-	-
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	55	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,023	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	41	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	41	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	55	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	85	*****	*****	*****	*****	0	*****	0	*****	-	-
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	32	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	550	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	33	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	44	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	19	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	369	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	23	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	27	*****	*****	*****	*****	0	*****	0	*****	-	-
Race: Asian											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,070	*****	*****	*****	*****	0	*****	-0.81	*****	-	-
ARBs (183-day prior, 14-day gap)	7,811	*****	*****	*****	*****	0.81	*****	-0.81	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	0	*****	-2.15	*****	-	-
ARBs (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	2.15	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,070	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	7,811	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	1,026	*****	*****	*****	*****	0	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	775	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	7,366	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	698	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	698	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	743	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	957	*****	*****	*****	*****	0	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk		Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	515	*****	*****	*****	*****	0	*****	-2.16	*****	-	-
ARBs (183-day prior, 14-day gap)	5,969	*****	*****	*****	*****	2.16	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	385	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	385	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	499	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	769	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	410	*****	*****	*****	*****	0	*****	-1.04	*****	-	-
ARBs (183-day prior, 14-day gap)	5,294	*****	*****	*****	*****	1.04	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	264	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	264	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	397	*****	*****	*****	*****	0	*****	-8.23	*****	-	-
ARBs (183-day prior, 14-day gap)	678	*****	*****	*****	*****	8.23	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	269	*****	*****	*****	*****	0	*****	-1.55	*****	-	-
ARBs (183-day prior, 14-day gap)	3,215	*****	*****	*****	*****	1.55	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	100	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	100	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	262	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	401	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	184	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	2,248	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	55	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	55	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	179	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	261	*****	*****	*****	*****	0	*****	0	*****	-	-
Race: Black											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	6,989	*****	*****	*****	*****	4.36	*****	-2.45	*****	0.60 (0.31, 1.18)	0.139
ARBs (183-day prior, 14-day gap)	55,801	*****	*****	*****	*****	6.8	*****	-4.11	*****	0.50 (0.17, 1.46)	0.206
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	4.11	*****	-4.11	*****	0.50 (0.17, 1.46)	0.206
ARBs (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	8.21	*****	-4.11	*****	0.50 (0.17, 1.46)	0.206

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	4.36	*****	-1.17	*****	0.74 (0.32, 1.70)	0.482
ARBs (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	5.53	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	6,989	*****	*****	*****	*****	3.9	*****	-9.75	*****	0.28 (0.07, 1.14)	0.075
ARBs (183-day prior, 14-day gap)	55,801	*****	*****	*****	*****	13.65	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	4.04	*****	-8.08	*****	0.33 (0.07, 1.65)	0.178
ARBs (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	12.12	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	3.91	*****	-10.53	*****	0.27 (0.06, 1.26)	0.095
ARBs (183-day prior, 14-day gap)	6,967	*****	*****	*****	*****	14.44	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	5,495	*****	*****	*****	*****	5.59	*****	-1.82	*****	0.76 (0.18, 3.21)	0.711
ARBs (183-day prior, 14-day gap)	52,264	*****	*****	*****	*****	7.4	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	5,052	*****	*****	*****	*****	6.92	*****	0	*****	1.00 (0.14, 7.10)	1
ARBs (183-day prior, 14-day gap)	5,052	*****	*****	*****	*****	6.92	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	5,480	*****	*****	*****	*****	5.6	*****	1.19	*****	1.29 (0.18, 9.14)	0.801
ARBs (183-day prior, 14-day gap)	6,431	*****	*****	*****	*****	4.41	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	3,368	*****	*****	*****	*****	8.15	*****	1.53	*****	1.25 (0.29, 5.37)	0.764
ARBs (183-day prior, 14-day gap)	37,443	*****	*****	*****	*****	6.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	2,215	*****	*****	*****	*****	6.58	*****	6.58	*****	-	-
ARBs (183-day prior, 14-day gap)	2,215	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	3,361	*****	*****	*****	*****	8.16	*****	8.16	*****	-	-
ARBs (183-day prior, 14-day gap)	4,686	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	2,573	*****	*****	*****	*****	2.18	*****	-2.05	*****	0.53 (0.07, 3.92)	0.533
ARBs (183-day prior, 14-day gap)	32,130	*****	*****	*****	*****	4.23	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,452	*****	*****	*****	*****	0	*****	-5.49	*****	-	-
ARBs (183-day prior, 14-day gap)	1,452	*****	*****	*****	*****	5.49	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	2,568	*****	*****	*****	*****	2.18	*****	-2.3	*****	0.49 (0.05, 4.74)	0.54
ARBs (183-day prior, 14-day gap)	3,985	*****	*****	*****	*****	4.48	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	1,423	*****	*****	*****	*****	3.49	*****	-0.69	*****	0.85 (0.11, 6.44)	0.872
ARBs (183-day prior, 14-day gap)	17,230	*****	*****	*****	*****	4.18	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	415	*****	*****	*****	*****	0	*****	-14.54	*****	-	-
ARBs (183-day prior, 14-day gap)	415	*****	*****	*****	*****	14.54	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	1,420	*****	*****	*****	*****	3.49	*****	1	*****	1.42 (0.09, 22.73)	0.804
ARBs (183-day prior, 14-day gap)	2,097	*****	*****	*****	*****	2.49	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	965	*****	*****	*****	*****	4.89	*****	1.99	*****	1.80 (0.22, 14.65)	0.585
ARBs (183-day prior, 14-day gap)	11,238	*****	*****	*****	*****	2.9	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	194	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	194	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	966	*****	*****	*****	*****	4.89	*****	1.24	*****	1.32 (0.08, 21.03)	0.846
ARBs (183-day prior, 14-day gap)	1,324	*****	*****	*****	*****	3.64	*****				
Race: Pacific Islander											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	61	*****	*****	*****	*****	0	*****	-8.97	*****	-	-
ARBs (183-day prior, 14-day gap)	478	*****	*****	*****	*****	8.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****	0	*****	-	-
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	61	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	478	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	50	*****	*****	*****	*****	0	*****	0	*****	-	-
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	52	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	447	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	41	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	41	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	45	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	46	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	34	*****	*****	*****	*****	0	*****	-34.82	*****	-	-
ARBs (183-day prior, 14-day gap)	362	*****	*****	*****	*****	34.82	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	21	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	21	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	29	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	39	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	22	*****	*****	*****	*****	0	*****	-17.55	*****	-	-
ARBs (183-day prior, 14-day gap)	337	*****	*****	*****	*****	17.55	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	12	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	12	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	19	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	35	*****	*****	*****	*****	0	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	13	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	192	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	11	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	21	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	138	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (183-day prior, 14-day gap)	15	*****	*****	*****	*****	0	*****	0	*****	-	-
Race: White											
Overall											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	32,805	*****	*****	*****	*****	2.48	*****	0.07	*****	0.97 (0.66, 1.42)	0.858
ARBs (183-day prior, 14-day gap)	223,252	*****	*****	*****	*****	2.4	*****	0.07	*****	0.97 (0.66, 1.42)	0.858

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	3.61	*****	0	*****	1.00 (0.58, 1.72)	1
ARBs (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	3.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	2.48	*****	-0.16	*****	0.89 (0.55, 1.44)	0.647
ARBs (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	2.63	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	32,805	*****	*****	*****	*****	3.69	*****	-1.11	*****	0.75 (0.38, 1.49)	0.413
ARBs (183-day prior, 14-day gap)	223,252	*****	*****	*****	*****	4.81	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	3.37	*****	-2.11	*****	0.62 (0.26, 1.48)	0.28
ARBs (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	5.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	3.69	*****	-2.03	*****	0.64 (0.28, 1.46)	0.287
ARBs (183-day prior, 14-day gap)	32,796	*****	*****	*****	*****	5.73	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	26,529	*****	*****	*****	*****	3.29	*****	0.49	*****	1.16 (0.50, 2.74)	0.727
ARBs (183-day prior, 14-day gap)	209,760	*****	*****	*****	*****	2.81	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	24,768	*****	*****	*****	*****	3.9	*****	0	*****	1.00 (0.32, 3.10)	1
ARBs (183-day prior, 14-day gap)	24,768	*****	*****	*****	*****	3.9	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	26,520	*****	*****	*****	*****	3.3	*****	-1.17	*****	0.74 (0.27, 2.04)	0.564
ARBs (183-day prior, 14-day gap)	30,621	*****	*****	*****	*****	4.47	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk		Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
61 - 90 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	18,317	*****	*****	*****	*****	2.92	*****	0.74	*****	1.35 (0.47, 3.85)	0.575
ARBs (183-day prior, 14-day gap)	165,181	*****	*****	*****	*****	2.18	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	13,479	*****	*****	*****	*****	3.15	*****	3.15	*****	-	-
ARBs (183-day prior, 14-day gap)	13,479	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	18,311	*****	*****	*****	*****	2.92	*****	2.92	*****	-	-
ARBs (183-day prior, 14-day gap)	24,143	*****	*****	*****	*****	0	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	14,962	*****	*****	*****	*****	2.48	*****	0.79	*****	1.47 (0.66, 3.25)	0.346
ARBs (183-day prior, 14-day gap)	146,922	*****	*****	*****	*****	1.69	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	9,689	*****	*****	*****	*****	4.33	*****	0.72	*****	1.20 (0.37, 3.93)	0.763
ARBs (183-day prior, 14-day gap)	9,689	*****	*****	*****	*****	3.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	14,956	*****	*****	*****	*****	2.48	*****	0.42	*****	1.20 (0.44, 3.31)	0.724
ARBs (183-day prior, 14-day gap)	21,311	*****	*****	*****	*****	2.06	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	9,241	*****	*****	*****	*****	1.07	*****	-0.67	*****	0.63 (0.15, 2.64)	0.529
ARBs (183-day prior, 14-day gap)	92,122	*****	*****	*****	*****	1.74	*****				

Table 23. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	3,652	*****	*****	*****	*****	3.25	*****	0	*****	1.00 (0.14, 7.10)	1
ARBs (183-day prior, 14-day gap)	3,652	*****	*****	*****	*****	3.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	9,237	*****	*****	*****	*****	1.07	*****	-0.08	*****	0.96 (0.16, 5.74)	0.963
ARBs (183-day prior, 14-day gap)	12,898	*****	*****	*****	*****	1.15	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (183-day prior, 14-day gap)	6,366	*****	*****	*****	*****	0.72	*****	-0.75	*****	0.49 (0.07, 3.65)	0.487
ARBs (183-day prior, 14-day gap)	66,936	*****	*****	*****	*****	1.47	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (183-day prior, 14-day gap)	1,767	*****	*****	*****	*****	3.02	*****	3.02	*****	-	-
ARBs (183-day prior, 14-day gap)	1,767	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (183-day prior, 14-day gap)	6,363	*****	*****	*****	*****	0.72	*****	-1.31	*****	0.37 (0.04, 3.27)	0.368
ARBs (183-day prior, 14-day gap)	8,999	*****	*****	*****	*****	2.03	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 24. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	49,629	*****	*****	*****	*****	2.43	*****	-4.3	*****	0.34 (0.25, 0.47)	<0.001
ACEI (14-day gap)	695,068	*****	*****	*****	*****	6.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	49,628	*****	*****	*****	*****	2.52	*****	-6.73	*****	0.27 (0.17, 0.43)	<0.001
ACEI (14-day gap)	49,628	*****	*****	*****	*****	9.26	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	49,628	*****	*****	*****	*****	2.43	*****	-3.65	*****	0.37 (0.26, 0.53)	<0.001
ACEI (14-day gap)	49,628	*****	*****	*****	*****	6.08	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 25. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-Up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Overall											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	49,629	*****	*****	*****	*****	2.43	*****	-4.3	*****	0.34 (0.25, 0.47)	<0.001
ACEI (14-day prior, 14-day gap)	695,068	*****	*****	*****	*****	6.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	2.52	*****	-6.73	*****	0.27 (0.17, 0.43)	<0.001
ACEI (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	9.26	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	2.43	*****	-3.65	*****	0.37 (0.26, 0.53)	<0.001
ACEI (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	6.08	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	49,629	*****	*****	*****	*****	3.93	*****	-11.42	*****	0.25 (0.15, 0.42)	<0.001
ACEI (14-day prior, 14-day gap)	695,068	*****	*****	*****	*****	15.35	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	3.77	*****	-13.06	*****	0.22 (0.12, 0.41)	<0.001
ACEI (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	16.83	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	3.93	*****	-11.34	*****	0.25 (0.14, 0.45)	<0.001
ACEI (14-day prior, 14-day gap)	49,628	*****	*****	*****	*****	15.26	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	37,404	*****	*****	*****	*****	3.94	*****	-2.1	*****	0.65 (0.35, 1.23)	0.188
ACEI (14-day prior, 14-day gap)	638,536	*****	*****	*****	*****	6.05	*****				

Table 25. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-Up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk		Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	34,305	*****	*****	*****	*****	2.92	*****	-3.89	*****	0.43 (0.16, 1.12)	0.082
ACEI (14-day prior, 14-day gap)	34,305	*****	*****	*****	*****	6.8	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	37,403	*****	*****	*****	*****	3.94	*****	-1.3	*****	0.74 (0.34, 1.63)	0.46
ACEI (14-day prior, 14-day gap)	45,509	*****	*****	*****	*****	5.25	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	25,147	*****	*****	*****	*****	2.69	*****	-3.09	*****	0.47 (0.19, 1.13)	0.092
ACEI (14-day prior, 14-day gap)	463,084	*****	*****	*****	*****	5.78	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	17,306	*****	*****	*****	*****	1.67	*****	-5	*****	0.25 (0.05, 1.18)	0.08
ACEI (14-day prior, 14-day gap)	17,306	*****	*****	*****	*****	6.67	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	25,146	*****	*****	*****	*****	2.69	*****	-4.2	*****	0.39 (0.14, 1.04)	0.06
ACEI (14-day prior, 14-day gap)	34,002	*****	*****	*****	*****	6.89	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	19,929	*****	*****	*****	*****	0.78	*****	-3.61	*****	0.18 (0.06, 0.55)	0.003
ACEI (14-day prior, 14-day gap)	397,797	*****	*****	*****	*****	4.39	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	11,912	*****	*****	*****	*****	0.59	*****	-2.34	*****	0.20 (0.02, 1.71)	0.142
ACEI (14-day prior, 14-day gap)	11,912	*****	*****	*****	*****	2.93	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	19,928	*****	*****	*****	*****	0.78	*****	-1.11	*****	0.40 (0.11, 1.45)	0.162
ACEI (14-day prior, 14-day gap)	29,452	*****	*****	*****	*****	1.89	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	12,764	*****	*****	*****	*****	1.9	*****	-2.22	*****	0.46 (0.19, 1.12)	0.086
ACEI (14-day prior, 14-day gap)	235,571	*****	*****	*****	*****	4.12	*****				

Table 25. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-Up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	4,378	*****	*****	*****	*****	2.77	*****	-1.39	*****	0.67 (0.11, 3.99)	0.657
ACEI (14-day prior, 14-day gap)	4,378	*****	*****	*****	*****	4.16	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	12,766	*****	*****	*****	*****	1.9	*****	-1.65	*****	0.52 (0.18, 1.48)	0.222
ACEI (14-day prior, 14-day gap)	17,106	*****	*****	*****	*****	3.55	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	9,031	*****	*****	*****	*****	1.5	*****	-2.05	*****	0.42 (0.13, 1.31)	0.133
ACEI (14-day prior, 14-day gap)	164,784	*****	*****	*****	*****	3.54	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	2,024	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day prior, 14-day gap)	2,024	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	9,030	*****	*****	*****	*****	1.5	*****	-2.59	*****	0.36 (0.10, 1.32)	0.124
ACEI (14-day prior, 14-day gap)	11,426	*****	*****	*****	*****	4.09	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 26. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (-183, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	49,583	*****	*****	*****	*****	2.37	*****	-4.1	*****	0.35 (0.25, 0.48)	<0.001
ACEI (14-day gap)	694,204	*****	*****	*****	*****	6.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	49,582	*****	*****	*****	*****	2.42	*****	-6.42	*****	0.27 (0.17, 0.43)	<0.001
ACEI (14-day gap)	49,582	*****	*****	*****	*****	8.84	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	49,582	*****	*****	*****	*****	2.37	*****	-3.47	*****	0.38 (0.27, 0.55)	<0.001
ACEI (14-day gap)	49,582	*****	*****	*****	*****	5.85	*****				
Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	46	*****	*****	*****	*****	77.34	*****	-190.86	*****	0.26 (0.04, 1.91)	0.186
ACEI (14-day gap)	864	*****	*****	*****	*****	268.2	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	39	*****	*****	*****	*****	186.22	*****	-186.22	*****	0.50 (0.05, 5.51)	0.571
ACEI (14-day gap)	39	*****	*****	*****	*****	372.44	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	39	*****	*****	*****	*****	88.73	*****	-143.29	*****	0.37 (0.04, 3.58)	0.392
ACEI (14-day gap)	39	*****	*****	*****	*****	232.02	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 27: Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (ever, -1)

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	49,296	*****	*****	*****	*****	2.26	*****	-3.61	*****	0.37 (0.26, 0.51)	<0.001
ACEI (14-day gap)	687,748	*****	*****	*****	*****	5.88	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	49,295	*****	*****	*****	*****	2.54	*****	-4.87	*****	0.34 (0.22, 0.55)	<0.001
ACEI (14-day gap)	49,295	*****	*****	*****	*****	7.41	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	49,295	*****	*****	*****	*****	2.26	*****	-2.7	*****	0.43 (0.29, 0.62)	<0.001
ACEI (14-day gap)	49,295	*****	*****	*****	*****	4.97	*****				
Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	333	*****	*****	*****	*****	31.78	*****	-65.3	*****	0.30 (0.10, 0.93)	0.037
ACEI (14-day gap)	7,320	*****	*****	*****	*****	97.08	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	327	*****	*****	*****	*****	35.77	*****	-107.3	*****	0.25 (0.05, 1.18)	0.08
ACEI (14-day gap)	327	*****	*****	*****	*****	143.06	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	327	*****	*****	*****	*****	32.31	*****	-88.41	*****	0.23 (0.07, 0.80)	0.021
ACEI (14-day gap)	327	*****	*****	*****	*****	120.71	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 28. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Serious Allergies

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	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% Confidence Interval)	Wald P-Value
No Serious allergies										
Site-Adjusted Analysis										
SV (14-day gap, history of ACEI (-14, -1))	44,259	*****	*****	*****	*****	2.23	*****	-4.24	*****	0.33 (0.23, 0.46) <0.001
ACEI (14-day gap)	584,072	*****	*****	*****	*****	6.47	*****			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹										
SV (14-day gap, history of ACEI (-14, -1))	44,253	*****	*****	*****	*****	2.21	*****	-5.94	*****	0.27 (0.16, 0.45) <0.001
ACEI (14-day gap)	44,253	*****	*****	*****	*****	8.15	*****			
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
SV (14-day gap, history of ACEI (-14, -1))	44,253	*****	*****	*****	*****	2.23	*****	-3	*****	0.40 (0.27, 0.59) <0.001
ACEI (14-day gap)	44,253	*****	*****	*****	*****	5.22	*****			
Serious allergies										
Site-Adjusted Analysis										
SV (14-day gap, history of ACEI (-14, -1))	5,370	*****	*****	*****	*****	4.27	*****	-4.05	*****	0.49 (0.23, 1.04) 0.063
ACEI (14-day gap)	110,996	*****	*****	*****	*****	8.31	*****			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹										
SV (14-day gap, history of ACEI (-14, -1))	5,365	*****	*****	*****	*****	4.36	*****	-8.72	*****	0.33 (0.11, 1.03) 0.057
ACEI (14-day gap)	5,365	*****	*****	*****	*****	13.09	*****			
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
SV (14-day gap, history of ACEI (-14, -1))	5,365	*****	*****	*****	*****	4.27	*****	-4.11	*****	0.47 (0.20, 1.14) 0.094
ACEI (14-day gap)	5,365	*****	*****	*****	*****	8.38	*****			

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 29. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Sex: Male											
Overall											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	34,743	*****	*****	*****	*****	2.57	*****	-3.41	*****	0.41 (0.28, 0.58)	<0.001
ACEI (14-day gap)	353,146	*****	*****	*****	*****	5.98	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	34,715	*****	*****	*****	*****	2.82	*****	-4.46	*****	0.39 (0.23, 0.66)	<0.001
ACEI (14-day gap)	34,715	*****	*****	*****	*****	7.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	34,715	*****	*****	*****	*****	2.57	*****	-1.87	*****	0.54 (0.35, 0.84)	0.006
ACEI (14-day gap)	34,715	*****	*****	*****	*****	4.44	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	34,743	*****	*****	*****	*****	3.19	*****	-11.41	*****	0.21 (0.11, 0.43)	<0.001
ACEI (14-day gap)	353,146	*****	*****	*****	*****	14.6	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	34,715	*****	*****	*****	*****	3.31	*****	-9.92	*****	0.25 (0.12, 0.54)	<0.001
ACEI (14-day gap)	34,715	*****	*****	*****	*****	13.23	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	34,715	*****	*****	*****	*****	3.19	*****	-8.46	*****	0.27 (0.12, 0.58)	<0.001
ACEI (14-day gap)	34,715	*****	*****	*****	*****	11.65	*****				

Table 29. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence	Risk per	Incidence Rate	Difference in	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²	
			Person Days at Risk	Person Years at Risk		Rate per 1,000 Person Years	1,000 New Users	Difference per 1,000 Person Years	Risk per 1,000 New Users			
31 - 60 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-14, -1))	26,387	*****	*****	*****	*****	4.46	*****		-1.13	*****	0.79 (0.39, 1.62)	0.52
ACEI (14-day gap)	325,667	*****	*****	*****	*****	5.59	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-14, -1))	24,158	*****	*****	*****	*****	3.44	*****		-0.69	*****	0.83 (0.25, 2.73)	0.763
ACEI (14-day gap)	24,158	*****	*****	*****	*****	4.13	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-14, -1))	26,368	*****	*****	*****	*****	4.46	*****		0.49	*****	1.09 (0.42, 2.83)	0.857
ACEI (14-day gap)	31,762	*****	*****	*****	*****	3.97	*****					
61 - 90 Days												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-14, -1))	17,862	*****	*****	*****	*****	3.79	*****		-0.95	*****	0.80 (0.33, 1.98)	0.636
ACEI (14-day gap)	236,803	*****	*****	*****	*****	4.74	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-14, -1))	12,310	*****	*****	*****	*****	2.34	*****		-3.52	*****	0.40 (0.08, 2.06)	0.273
ACEI (14-day gap)	12,310	*****	*****	*****	*****	5.86	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-14, -1))	17,847	*****	*****	*****	*****	3.79	*****		-0.58	*****	0.87 (0.28, 2.66)	0.806
ACEI (14-day gap)	23,871	*****	*****	*****	*****	4.37	*****					

Table 29. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	14,181	*****	*****	*****	*****	0.36	*****	-3.14	*****	0.10 (0.01, 0.74)	0.024
ACEI (14-day gap)	203,937	*****	*****	*****	*****	3.5	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	8,440	*****	*****	*****	*****	0.82	*****	-1.64	*****	0.33 (0.03, 3.20)	0.341
ACEI (14-day gap)	8,440	*****	*****	*****	*****	2.47	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	14,171	*****	*****	*****	*****	0.36	*****	-1.26	*****	0.22 (0.03, 1.79)	0.155
ACEI (14-day gap)	20,616	*****	*****	*****	*****	1.62	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	9,105	*****	*****	*****	*****	2.67	*****	-0.74	*****	0.78 (0.32, 1.92)	0.587
ACEI (14-day gap)	120,273	*****	*****	*****	*****	3.41	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	3,136	*****	*****	*****	*****	5.81	*****	1.94	*****	1.50 (0.25, 8.98)	0.657
ACEI (14-day gap)	3,136	*****	*****	*****	*****	3.87	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	9,101	*****	*****	*****	*****	2.67	*****	0.56	*****	1.23 (0.36, 4.25)	0.744
ACEI (14-day gap)	12,007	*****	*****	*****	*****	2.11	*****				

Table 29. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	6,443	*****	*****	*****	*****	2.1	*****	-0.81	*****	0.70 (0.22, 2.25)	0.553
ACEI (14-day gap)	84,138	*****	*****	*****	*****	2.91	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	1,481	*****	*****	*****	*****	0	*****	-3.62	*****	-	-
ACEI (14-day gap)	1,481	*****	*****	*****	*****	3.62	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	6,440	*****	*****	*****	*****	2.1	*****	-0.82	*****	0.69 (0.16, 2.88)	0.608
ACEI (14-day gap)	8,010	*****	*****	*****	*****	2.92	*****				
Sex: Female											
Overall											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	14,886	*****	*****	*****	*****	2.09	*****	-5.43	*****	0.26 (0.14, 0.49)	<0.001
ACEI (14-day gap)	341,922	*****	*****	*****	*****	7.53	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	14,885	*****	*****	*****	*****	2.94	*****	-8.82	*****	0.25 (0.12, 0.54)	<0.001
ACEI (14-day gap)	14,885	*****	*****	*****	*****	11.76	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	14,885	*****	*****	*****	*****	2.09	*****	-6.87	*****	0.22 (0.11, 0.43)	<0.001
ACEI (14-day gap)	14,885	*****	*****	*****	*****	8.96	*****				

Table 29. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	14,886	*****	*****	*****	*****	5.67	*****	-10.46	*****	0.34 (0.15, 0.77)	0.01
ACEI (14-day gap)	341,922	*****	*****	*****	*****	16.13	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	14,885	*****	*****	*****	*****	5.91	*****	-15.75	*****	0.27 (0.11, 0.67)	0.005
ACEI (14-day gap)	14,885	*****	*****	*****	*****	21.65	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	14,885	*****	*****	*****	*****	5.67	*****	-16.55	*****	0.25 (0.10, 0.61)	0.002
ACEI (14-day gap)	14,885	*****	*****	*****	*****	22.22	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	11,017	*****	*****	*****	*****	2.7	*****	-3.82	*****	0.42 (0.10, 1.69)	0.223
ACEI (14-day gap)	312,869	*****	*****	*****	*****	6.52	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	9,881	*****	*****	*****	*****	3.41	*****	-3.41	*****	0.50 (0.09, 2.73)	0.423
ACEI (14-day gap)	9,881	*****	*****	*****	*****	6.83	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	11,016	*****	*****	*****	*****	2.7	*****	-2.59	*****	0.52 (0.10, 2.68)	0.434
ACEI (14-day gap)	13,364	*****	*****	*****	*****	5.29	*****				

Table 29. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	7,285	*****	*****	*****	*****	0	*****	-6.88	*****	-	-
ACEI (14-day gap)	226,281	*****	*****	*****	*****	6.88	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	4,861	*****	*****	*****	*****	0	*****	-8.99	*****	-	-
ACEI (14-day gap)	4,861	*****	*****	*****	*****	8.99	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	7,285	*****	*****	*****	*****	0	*****	-10.6	*****	-	-
ACEI (14-day gap)	9,880	*****	*****	*****	*****	10.6	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	5,748	*****	*****	*****	*****	1.81	*****	-3.5	*****	0.34 (0.08, 1.37)	0.128
ACEI (14-day gap)	193,860	*****	*****	*****	*****	5.31	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	3,298	*****	*****	*****	*****	0	*****	-4.16	*****	-	-
ACEI (14-day gap)	3,298	*****	*****	*****	*****	4.16	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	5,748	*****	*****	*****	*****	1.81	*****	-0.82	*****	0.67 (0.12, 3.65)	0.642
ACEI (14-day gap)	8,472	*****	*****	*****	*****	2.63	*****				

Table 29. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin-Converting Enzyme Inhibitors (ACEI) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	3,659	*****	*****	*****	*****	0	*****	-4.87	*****	-	-
ACEI (14-day gap)	115,298	*****	*****	*****	*****	4.87	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	1,223	*****	*****	*****	*****	0	*****	-4.95	*****	-	-
ACEI (14-day gap)	1,223	*****	*****	*****	*****	4.95	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	3,661	*****	*****	*****	*****	0	*****	-8.41	*****	-	-
ACEI (14-day gap)	4,853	*****	*****	*****	*****	8.41	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	2,588	*****	*****	*****	*****	0	*****	-4.21	*****	-	-
ACEI (14-day gap)	80,646	*****	*****	*****	*****	4.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	565	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	565	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	2,588	*****	*****	*****	*****	0	*****	-4.37	*****	-	-
ACEI (14-day gap)	3,182	*****	*****	*****	*****	4.37	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 30. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 18-44 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	1,592	*****	*****	*****	*****	2.03	*****	-7.12	*****	0.22 (0.03, 1.60)	0.136
ACEI (14-day gap)	21,593	*****	*****	*****	*****	9.15	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	1,576	*****	*****	*****	*****	4.04	*****	-4.04	*****	0.50 (0.05, 5.51)	0.571
ACEI (14-day gap)	1,576	*****	*****	*****	*****	8.07	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	1,576	*****	*****	*****	*****	2.04	*****	-5.55	*****	0.27 (0.03, 2.40)	0.239
ACEI (14-day gap)	1,576	*****	*****	*****	*****	7.6	*****				
Age Group: 45-54 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	3,425	*****	*****	*****	*****	3.64	*****	-6.64	*****	0.35 (0.13, 0.94)	0.037
ACEI (14-day gap)	45,072	*****	*****	*****	*****	10.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	3,386	*****	*****	*****	*****	6.79	*****	-5.1	*****	0.57 (0.17, 1.95)	0.372
ACEI (14-day gap)	3,386	*****	*****	*****	*****	11.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	3,386	*****	*****	*****	*****	3.68	*****	-5.1	*****	0.42 (0.13, 1.31)	0.135
ACEI (14-day gap)	3,386	*****	*****	*****	*****	8.77	*****				

Table 30. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 55-64 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	8,067	*****	*****	*****	*****	1.58	*****	-7.36	*****	0.17 (0.06, 0.46)	<0.001
ACEI (14-day gap)	97,279	*****	*****	*****	*****	8.94	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	8,048	*****	*****	*****	*****	2.83	*****	-6.37	*****	0.31 (0.10, 0.94)	0.039
ACEI (14-day gap)	8,048	*****	*****	*****	*****	9.2	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	8,048	*****	*****	*****	*****	1.58	*****	-4.72	*****	0.23 (0.08, 0.68)	0.008
ACEI (14-day gap)	8,048	*****	*****	*****	*****	6.3	*****				
Age Group: 65+ Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	36,545	*****	*****	*****	*****	2.52	*****	-3.51	*****	0.39 (0.28, 0.56)	<0.001
ACEI (14-day gap)	531,124	*****	*****	*****	*****	6.03	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	36,459	*****	*****	*****	*****	2.51	*****	-5.44	*****	0.32 (0.19, 0.54)	<0.001
ACEI (14-day gap)	36,459	*****	*****	*****	*****	7.96	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	36,459	*****	*****	*****	*****	2.44	*****	-2.71	*****	0.44 (0.29, 0.67)	<0.001
ACEI (14-day gap)	36,459	*****	*****	*****	*****	5.15	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 31. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Unknown											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	8,192	*****	*****	*****	*****	1.55	*****	-5.22	*****	0.22 (0.08, 0.58)	0.002
ACEI (14-day gap)	99,667	*****	*****	*****	*****	6.76	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	8,189	*****	*****	*****	*****	1.38	*****	-4.83	*****	0.22 (0.05, 1.03)	0.054
ACEI (14-day gap)	8,189	*****	*****	*****	*****	6.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	8,189	*****	*****	*****	*****	1.55	*****	-3.39	*****	0.30 (0.10, 0.89)	0.03
ACEI (14-day gap)	8,189	*****	*****	*****	*****	4.93	*****				
Race: American Indian											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	165	*****	*****	*****	*****	0	*****	-2.38	*****	-	-
ACEI (14-day gap)	4,526	*****	*****	*****	*****	2.38	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	159	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	159	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	159	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	159	*****	*****	*****	*****	0	*****				

Table 31. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Asian											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	526	*****	*****	*****	*****	0	*****	-2.63	*****	-	-
ACEI (14-day gap)	7,873	*****	*****	*****	*****	2.63	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	520	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	520	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	520	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	520	*****	*****	*****	*****	0	*****				
Race: Black											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	6,074	*****	*****	*****	*****	6.91	*****	-15.66	*****	0.29 (0.16, 0.51)	<0.001
ACEI (14-day gap)	92,135	*****	*****	*****	*****	22.57	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	6,067	*****	*****	*****	*****	8.07	*****	-19.17	*****	0.30 (0.13, 0.65)	0.003
ACEI (14-day gap)	6,067	*****	*****	*****	*****	27.24	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	6,067	*****	*****	*****	*****	6.92	*****	-10.88	*****	0.36 (0.19, 0.69)	0.002
ACEI (14-day gap)	6,067	*****	*****	*****	*****	17.8	*****				

Table 31. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Pacific Islander											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	46	*****	*****	*****	*****	0	*****	-14.36	*****	-	-
ACEI (14-day gap)	741	*****	*****	*****	*****	14.36	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	41	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	41	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	41	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	41	*****	*****	*****	*****	0	*****				
Race: White											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-14, -1))	34,626	*****	*****	*****	*****	2.02	*****	-2.33	*****	0.44 (0.30, 0.67)	<0.001
ACEI (14-day gap)	490,126	*****	*****	*****	*****	4.35	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-14, -1))	34,613	*****	*****	*****	*****	1.58	*****	-4.18	*****	0.28 (0.14, 0.54)	<0.001
ACEI (14-day gap)	34,613	*****	*****	*****	*****	5.76	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-14, -1))	34,613	*****	*****	*****	*****	2.02	*****	-1.91	*****	0.49 (0.30, 0.78)	0.003
ACEI (14-day gap)	34,613	*****	*****	*****	*****	3.93	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 32. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	35,703	*****	*****	*****	*****	3.18	*****	0.16	*****	0.99 (0.71, 1.38)	0.937
ARBs (14-day gap)	337,204	*****	*****	*****	*****	3.01	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	35,702	*****	*****	*****	*****	3.78	*****	1.12	*****	1.42 (0.79, 2.56)	0.241
ARBs (14-day gap)	35,702	*****	*****	*****	*****	2.66	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	35,702	*****	*****	*****	*****	3.18	*****	0.51	*****	1.14 (0.73, 1.77)	0.556
ARBs (14-day gap)	35,702	*****	*****	*****	*****	2.67	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 33. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
						Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Overall											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	35,703	*****	*****	*****	*****	3.18	*****	0.16	*****	0.99 (0.71, 1.38)	0.937
ARBs (14-day prior, 14-day gap)	337,204	*****	*****	*****	*****	3.01	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	3.78	*****	1.12	*****	1.42 (0.79, 2.56)	0.241
ARBs (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	2.66	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	3.18	*****	0.51	*****	1.14 (0.73, 1.77)	0.556
ARBs (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	2.67	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	35,703	*****	*****	*****	*****	5.08	*****	-0.88	*****	0.83 (0.47, 1.45)	0.508
ARBs (14-day prior, 14-day gap)	337,204	*****	*****	*****	*****	5.96	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	5.22	*****	2.01	*****	1.62 (0.67, 3.92)	0.28
ARBs (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	3.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	5.08	*****	1.22	*****	1.28 (0.58, 2.87)	0.542
ARBs (14-day prior, 14-day gap)	35,702	*****	*****	*****	*****	3.86	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	26,796	*****	*****	*****	*****	3.85	*****	0.44	*****	1.13 (0.52, 2.45)	0.757
ARBs (14-day prior, 14-day gap)	316,333	*****	*****	*****	*****	3.42	*****				

Table 33. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	Number of Events	Incidence	Risk per	Incidence	Difference	Hazard Ratio (95% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk		Rate per 1,000 Person Years	1,000 New Users	Rate per 1,000 Person Years	in Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	25,007	*****	*****	*****	*****	4.58	*****	1.96	*****	1.75 (0.51, 5.98)	0.372
ARBs (14-day prior, 14-day gap)	25,007	*****	*****	*****	*****	2.62	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	26,796	*****	*****	*****	*****	3.85	*****	1.37	*****	1.53 (0.51, 4.54)	0.447
ARBs (14-day prior, 14-day gap)	33,308	*****	*****	*****	*****	2.48	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	18,018	*****	*****	*****	*****	3.76	*****	0.95	*****	1.37 (0.55, 3.43)	0.5
ARBs (14-day prior, 14-day gap)	243,524	*****	*****	*****	*****	2.81	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	13,146	*****	*****	*****	*****	2.18	*****	1.09	*****	2.00 (0.18, 22.06)	0.571
ARBs (14-day prior, 14-day gap)	13,146	*****	*****	*****	*****	1.09	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	18,018	*****	*****	*****	*****	3.76	*****	2.76	*****	3.76 (0.73, 19.41)	0.113
ARBs (14-day prior, 14-day gap)	25,950	*****	*****	*****	*****	1	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	14,327	*****	*****	*****	*****	2.56	*****	0.31	*****	1.13 (0.52, 2.45)	0.752
ARBs (14-day prior, 14-day gap)	214,300	*****	*****	*****	*****	2.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	9,233	*****	*****	*****	*****	3.04	*****	-0.76	*****	0.80 (0.21, 2.98)	0.739
ARBs (14-day prior, 14-day gap)	9,233	*****	*****	*****	*****	3.8	*****				

Table 33. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	14,327	*****	*****	*****	*****	2.56	*****	-1.58	*****	0.62 (0.26, 1.49)	0.284
ARBs (14-day prior, 14-day gap)	22,771	*****	*****	*****	*****	4.14	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	9,006	*****	*****	*****	*****	1.63	*****	-0.44	*****	0.80 (0.25, 2.57)	0.714
ARBs (14-day prior, 14-day gap)	130,102	*****	*****	*****	*****	2.07	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	3,388	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day prior, 14-day gap)	3,388	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	9,006	*****	*****	*****	*****	1.63	*****	-0.21	*****	0.87 (0.21, 3.66)	0.854
ARBs (14-day prior, 14-day gap)	13,456	*****	*****	*****	*****	1.84	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day prior, 14-day gap)	6,275	*****	*****	*****	*****	1.47	*****	-0.09	*****	0.97 (0.23, 4.03)	0.962
ARBs (14-day prior, 14-day gap)	92,658	*****	*****	*****	*****	1.56	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day prior, 14-day gap)	1,660	*****	*****	*****	*****	3.26	*****	0	*****	1.00 (0.06, 15.99)	1
ARBs (14-day prior, 14-day gap)	1,660	*****	*****	*****	*****	3.26	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day prior, 14-day gap)	6,275	*****	*****	*****	*****	1.47	*****	0.48	*****	1.48 (0.21, 10.48)	0.697
ARBs (14-day prior, 14-day gap)	9,317	*****	*****	*****	*****	0.99	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 34. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (-183, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	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% Confidence Interval) ²	Wald P-Value ²	
No Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	35,668	*****	*****	*****	*****	2.84	*****	0.4	*****	1.12 (0.78, 1.59)	0.546
ARBs (14-day gap)	336,379	*****	*****	*****	*****	2.43	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	35,667	*****	*****	*****	*****	3.23	*****	0.98	*****	1.44 (0.76, 2.72)	0.265
ARBs (14-day gap)	35,667	*****	*****	*****	*****	2.24	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	35,667	*****	*****	*****	*****	2.84	*****	0.41	*****	1.14 (0.71, 1.81)	0.591
ARBs (14-day gap)	35,667	*****	*****	*****	*****	2.42	*****				
Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	35	*****	*****	*****	*****	390.63	*****	118.99	*****	1.30 (0.48, 3.57)	0.605
ARBs (14-day gap)	825	*****	*****	*****	*****	271.63	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	33	*****	*****	*****	*****	776.7	*****	776.7	*****	-	-
ARBs (14-day gap)	33	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	33	*****	*****	*****	*****	439.08	*****	330.56	*****	2.84 (0.51, 15.71)	0.233
ARBs (14-day gap)	33	*****	*****	*****	*****	108.52	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

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Table 35. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (ever, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	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% Confidence Interval)	Wald P-Value	
No Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	35,162	*****	*****	*****	*****	2.53	*****	0.49	*****	1.19 (0.81, 1.74)	0.369
ARBs (14-day gap)	329,845	*****	*****	*****	*****	2.03	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	35,157	*****	*****	*****	*****	2.85	*****	1.14	*****	1.67 (0.81, 3.41)	0.162
ARBs (14-day gap)	35,157	*****	*****	*****	*****	1.71	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	35,157	*****	*****	*****	*****	2.53	*****	0.63	*****	1.29 (0.77, 2.15)	0.329
ARBs (14-day gap)	35,157	*****	*****	*****	*****	1.89	*****				
Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	541	*****	*****	*****	*****	49.9	*****	1.96	*****	0.87 (0.43, 1.78)	0.705
ARBs (14-day gap)	7,359	*****	*****	*****	*****	47.94	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	535	*****	*****	*****	*****	81.05	*****	30.39	*****	1.60 (0.52, 4.89)	0.41
ARBs (14-day gap)	535	*****	*****	*****	*****	50.65	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	535	*****	*****	*****	*****	50.8	*****	13.01	*****	1.20 (0.46, 3.14)	0.706
ARBs (14-day gap)	535	*****	*****	*****	*****	37.79	*****				

¹Conditional analysis accounts for informative events and person-time.

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Table 36. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Serious Allergies

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Incidence Rate per 1,000 Person Years	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% Confidence Interval)	Wald P-Value
No Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	31,231	*****	*****	*****	*****	2.8	*****	0.22	*****	1.02 (0.70, 1.49)	0.925
ARBs (14-day gap)	282,750	*****	*****	*****	*****	2.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	31,227	*****	*****	*****	*****	3.32	*****	0.47	*****	1.17 (0.62, 2.19)	0.631
ARBs (14-day gap)	31,227	*****	*****	*****	*****	2.85	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	31,227	*****	*****	*****	*****	2.8	*****	0.12	*****	0.99 (0.61, 1.61)	0.975
ARBs (14-day gap)	31,227	*****	*****	*****	*****	2.68	*****				
Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	4,472	*****	*****	*****	*****	6.14	*****	0.65	*****	1.03 (0.50, 2.11)	0.931
ARBs (14-day gap)	54,454	*****	*****	*****	*****	5.5	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	4,459	*****	*****	*****	*****	6.37	*****	5.09	*****	5.00 (0.58, 42.80)	0.142
ARBs (14-day gap)	4,459	*****	*****	*****	*****	1.27	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	4,459	*****	*****	*****	*****	6.16	*****	2.81	*****	1.80 (0.62, 5.21)	0.278
ARBs (14-day gap)	4,459	*****	*****	*****	*****	3.36	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 37. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Sex: Male											
Overall											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	21,802	*****	*****	*****	*****	2.21	*****	-0.69	*****	0.72 (0.43, 1.20)	0.206
ARBs (14-day gap)	149,279	*****	*****	*****	*****	2.9	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	21,792	*****	*****	*****	*****	2.74	*****	0.46	*****	1.20 (0.52, 2.78)	0.67
ARBs (14-day gap)	21,792	*****	*****	*****	*****	2.29	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	21,792	*****	*****	*****	*****	2.21	*****	-0.37	*****	0.81 (0.43, 1.53)	0.519
ARBs (14-day gap)	21,792	*****	*****	*****	*****	2.58	*****				
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	21,802	*****	*****	*****	*****	5.1	*****	0.08	*****	0.97 (0.46, 2.03)	0.941
ARBs (14-day gap)	149,279	*****	*****	*****	*****	5.02	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	21,792	*****	*****	*****	*****	5.27	*****	1.98	*****	1.60 (0.52, 4.89)	0.41
ARBs (14-day gap)	21,792	*****	*****	*****	*****	3.29	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	21,792	*****	*****	*****	*****	5.11	*****	1.64	*****	1.43 (0.50, 4.12)	0.509
ARBs (14-day gap)	21,792	*****	*****	*****	*****	3.47	*****				

Table 37. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	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% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk							
31 - 60 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	16,532	*****	*****	*****	*****	1.78	*****	-1.1	*****	0.61 (0.14, 2.54)	0.493
ARBs (14-day gap)	139,809	*****	*****	*****	*****	2.88	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	15,257	*****	*****	*****	*****	2.13	*****	1.07	*****	2.00 (0.18, 22.06)	0.571
ARBs (14-day gap)	15,257	*****	*****	*****	*****	1.07	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	16,525	*****	*****	*****	*****	1.78	*****	-0.96	*****	0.65 (0.12, 3.54)	0.616
ARBs (14-day gap)	20,080	*****	*****	*****	*****	2.74	*****				
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	11,206	*****	*****	*****	*****	2.42	*****	0.01	*****	1.03 (0.24, 4.41)	0.968
ARBs (14-day gap)	107,362	*****	*****	*****	*****	2.41	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	8,113	*****	*****	*****	*****	1.77	*****	1.77	*****	-	-
ARBs (14-day gap)	8,113	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	11,204	*****	*****	*****	*****	2.42	*****	2.42	*****	-	-
ARBs (14-day gap)	15,670	*****	*****	*****	*****	0	*****				

Table 37. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	8,904	*****	*****	*****	*****	1.76	*****	-1	*****	0.63 (0.19, 2.01)	0.431
ARBs (14-day gap)	94,229	*****	*****	*****	*****	2.76	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	5,669	*****	*****	*****	*****	1.24	*****	-2.48	*****	0.33 (0.03, 3.20)	0.341
ARBs (14-day gap)	5,669	*****	*****	*****	*****	3.72	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	8,901	*****	*****	*****	*****	1.76	*****	-2.7	*****	0.39 (0.11, 1.40)	0.149
ARBs (14-day gap)	13,656	*****	*****	*****	*****	4.46	*****				
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	5,643	*****	*****	*****	*****	0.87	*****	-0.96	*****	0.50 (0.07, 3.69)	0.493
ARBs (14-day gap)	56,419	*****	*****	*****	*****	1.83	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	2,082	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	2,082	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	5,641	*****	*****	*****	*****	0.87	*****	-0.98	*****	0.46 (0.05, 4.40)	0.498
ARBs (14-day gap)	8,063	*****	*****	*****	*****	1.85	*****				

Table 37. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	3,939	*****	*****	*****	*****	0	*****	-2.15	*****	-	-
ARBs (14-day gap)	39,965	*****	*****	*****	*****	2.15	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	1,043	*****	*****	*****	*****	0	*****	-5.18	*****	-	-
ARBs (14-day gap)	1,043	*****	*****	*****	*****	5.18	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	3,939	*****	*****	*****	*****	0	*****	-0.84	*****	-	-
ARBs (14-day gap)	5,566	*****	*****	*****	*****	0.84	*****				
Sex: Female											
Overall											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	13,901	*****	*****	*****	*****	4.77	*****	1.66	*****	1.42 (0.91, 2.21)	0.125
ARBs (14-day gap)	187,925	*****	*****	*****	*****	3.1	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	13,901	*****	*****	*****	*****	5.57	*****	2.6	*****	1.87 (0.79, 4.42)	0.151
ARBs (14-day gap)	13,901	*****	*****	*****	*****	2.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	13,901	*****	*****	*****	*****	4.77	*****	1.86	*****	1.59 (0.85, 3.00)	0.148
ARBs (14-day gap)	13,901	*****	*****	*****	*****	2.9	*****				

Table 37. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
0 - 30 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	13,901	*****	*****	*****	*****	5.05	*****	-1.65	*****	0.73 (0.30, 1.80)	0.501
ARBs (14-day gap)	187,925	*****	*****	*****	*****	6.71	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	13,901	*****	*****	*****	*****	5.2	*****	0	*****	1.00 (0.29, 3.45)	1
ARBs (14-day gap)	13,901	*****	*****	*****	*****	5.2	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	13,901	*****	*****	*****	*****	5.05	*****	-0.36	*****	0.92 (0.28, 3.00)	0.885
ARBs (14-day gap)	13,901	*****	*****	*****	*****	5.42	*****				
31 - 60 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	10,264	*****	*****	*****	*****	7.23	*****	3.39	*****	1.88 (0.75, 4.72)	0.178
ARBs (14-day gap)	176,524	*****	*****	*****	*****	3.84	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	9,530	*****	*****	*****	*****	8.68	*****	6.94	*****	5.00 (0.58, 42.80)	0.142
ARBs (14-day gap)	9,530	*****	*****	*****	*****	1.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	10,264	*****	*****	*****	*****	7.23	*****	6.16	*****	6.54 (0.76, 56.04)	0.086
ARBs (14-day gap)	12,900	*****	*****	*****	*****	1.07	*****				

Table 37. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average	Average	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% Confidence Interval) ²	Wald P-Value ²
			Person Days at Risk	Person Years at Risk							
61 - 90 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	6,812	*****	*****	*****	*****	5.97	*****	2.84	*****	1.95 (0.60, 6.35)	0.269
ARBs (14-day gap)	136,162	*****	*****	*****	*****	3.13	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	4,891	*****	*****	*****	*****	2.92	*****	0	*****	1.00 (0.06, 15.99)	1
ARBs (14-day gap)	4,891	*****	*****	*****	*****	2.92	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	6,812	*****	*****	*****	*****	5.97	*****	3.37	*****	2.30 (0.38, 13.78)	0.361
ARBs (14-day gap)	9,983	*****	*****	*****	*****	2.59	*****				
91 - 180 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	5,423	*****	*****	*****	*****	3.88	*****	2.02	*****	2.13 (0.76, 5.96)	0.148
ARBs (14-day gap)	120,071	*****	*****	*****	*****	1.86	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	3,431	*****	*****	*****	*****	6.16	*****	4.11	*****	3.00 (0.31, 28.84)	0.341
ARBs (14-day gap)	3,431	*****	*****	*****	*****	2.05	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	5,423	*****	*****	*****	*****	3.88	*****	0.07	*****	1.03 (0.29, 3.64)	0.969
ARBs (14-day gap)	8,740	*****	*****	*****	*****	3.81	*****				

Table 37. Effect Estimates for Risk of Angioedema Sacubitril/Valsartan (SV) and Angiotensin II Receptor Blockers (ARB) 14-Day Inclusion 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Sex, Follow-up Time

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
181 - 270 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	3,363	*****	*****	*****	*****	2.92	*****	0.67	*****	1.31 (0.32, 5.47)	0.708
ARBs (14-day gap)	73,683	*****	*****	*****	*****	2.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	1,256	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	1,256	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	3,363	*****	*****	*****	*****	2.92	*****	1	*****	1.54 (0.22, 10.93)	0.666
ARBs (14-day gap)	5,149	*****	*****	*****	*****	1.92	*****				
271 - 365 Days											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	2,336	*****	*****	*****	*****	3.95	*****	2.84	*****	3.91 (0.88, 17.36)	0.073
ARBs (14-day gap)	52,693	*****	*****	*****	*****	1.11	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	618	*****	*****	*****	*****	8.8	*****	8.8	*****	-	-
ARBs (14-day gap)	618	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	2,337	*****	*****	*****	*****	3.95	*****	2.66	*****	3.08 (0.28, 33.93)	0.359
ARBs (14-day gap)	3,560	*****	*****	*****	*****	1.28	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 38. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 18-44 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	774	*****	*****	*****	*****	0	*****	-7.89	*****	-	-
ARBs (14-day gap)	8,505	*****	*****	*****	*****	7.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	762	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	762	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	762	*****	*****	*****	*****	0	*****	-4.13	*****	-	-
ARBs (14-day gap)	762	*****	*****	*****	*****	4.13	*****				
Age Group: 45-54 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	1,794	*****	*****	*****	*****	3.8	*****	-0.52	*****	0.88 (0.21, 3.71)	0.866
ARBs (14-day gap)	18,304	*****	*****	*****	*****	4.32	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	1,786	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	1,786	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	1,786	*****	*****	*****	*****	3.81	*****	2.31	*****	2.49 (0.23, 27.53)	0.456
ARBs (14-day gap)	1,786	*****	*****	*****	*****	1.5	*****				

Table 38. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Age Group: 55-64 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	4,275	*****	*****	*****	*****	6.8	*****	2.8	*****	1.62 (0.81, 3.27)	0.173
ARBs (14-day gap)	40,567	*****	*****	*****	*****	3.99	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	4,246	*****	*****	*****	*****	9.29	*****	6.64	*****	3.50 (0.73, 16.85)	0.118
ARBs (14-day gap)	4,246	*****	*****	*****	*****	2.66	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	4,246	*****	*****	*****	*****	6.83	*****	4.46	*****	2.68 (0.83, 8.74)	0.101
ARBs (14-day gap)	4,246	*****	*****	*****	*****	2.37	*****				
Age Group: 65+ Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	28,860	*****	*****	*****	*****	2.72	*****	0.02	*****	0.94 (0.63, 1.40)	0.747
ARBs (14-day gap)	269,828	*****	*****	*****	*****	2.71	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	28,797	*****	*****	*****	*****	3.24	*****	0.17	*****	1.06 (0.55, 2.01)	0.869
ARBs (14-day gap)	28,797	*****	*****	*****	*****	3.07	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	28,797	*****	*****	*****	*****	2.73	*****	-0.14	*****	0.91 (0.55, 1.50)	0.705
ARBs (14-day gap)	28,797	*****	*****	*****	*****	2.87	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 39. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Unknown											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	5,777	*****	*****	*****	*****	2.23	*****	-0.28	*****	0.85 (0.31, 2.35)	0.751
ARBs (14-day gap)	47,811	*****	*****	*****	*****	2.51	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	5,748	*****	*****	*****	*****	3.87	*****	1.93	*****	2.00 (0.37, 10.92)	0.423
ARBs (14-day gap)	5,748	*****	*****	*****	*****	1.93	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	5,748	*****	*****	*****	*****	2.24	*****	-2.31	*****	0.48 (0.15, 1.50)	0.205
ARBs (14-day gap)	5,748	*****	*****	*****	*****	4.55	*****				
Race: American Indian											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	86	*****	*****	*****	*****	0	*****	-1.36	*****	-	-
ARBs (14-day gap)	1,948	*****	*****	*****	*****	1.36	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	83	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	83	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	83	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	83	*****	*****	*****	*****	0	*****				

Table 39. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Asian											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	863	*****	*****	*****	*****	0	*****	-0.81	*****	-	-
ARBs (14-day gap)	7,814	*****	*****	*****	*****	0.81	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	834	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	834	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	834	*****	*****	*****	*****	0	*****	-2.55	*****	-	-
ARBs (14-day gap)	834	*****	*****	*****	*****	2.55	*****				
Race: Black											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	4,832	*****	*****	*****	*****	4.4	*****	-2.4	*****	0.60 (0.27, 1.36)	0.222
ARBs (14-day gap)	55,825	*****	*****	*****	*****	6.8	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	4,829	*****	*****	*****	*****	4.93	*****	-3.7	*****	0.57 (0.17, 1.95)	0.372
ARBs (14-day gap)	4,829	*****	*****	*****	*****	8.62	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	4,829	*****	*****	*****	*****	4.4	*****	-0.4	*****	0.82 (0.29, 2.31)	0.704
ARBs (14-day gap)	4,829	*****	*****	*****	*****	4.8	*****				

Table 39. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Pacific Islander											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	46	*****	*****	*****	*****	0	*****	-8.97	*****	-	-
ARBs (14-day gap)	478	*****	*****	*****	*****	8.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	40	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	40	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	40	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	40	*****	*****	*****	*****	0	*****				
Race: White											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-14, -1))	24,099	*****	*****	*****	*****	3.29	*****	0.89	*****	1.28 (0.86, 1.90)	0.229
ARBs (14-day gap)	223,328	*****	*****	*****	*****	2.4	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-14, -1))	24,091	*****	*****	*****	*****	3.56	*****	0.99	*****	1.38 (0.68, 2.83)	0.371
ARBs (14-day gap)	24,091	*****	*****	*****	*****	2.57	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-14, -1))	24,091	*****	*****	*****	*****	3.3	*****	1.24	*****	1.55 (0.89, 2.70)	0.124
ARBs (14-day gap)	24,091	*****	*****	*****	*****	2.06	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 40. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (7-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	2.14	*****	-4.77	*****	0.29 (0.21, 0.39)	<0.001
ACEI (7-day gap)	694,882	*****	*****	*****	*****	6.91	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (7-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	2.84	*****	-8.42	*****	0.25 (0.17, 0.37)	<0.001
ACEI (7-day gap)	69,639	*****	*****	*****	*****	11.26	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (7-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	2.14	*****	-4.48	*****	0.30 (0.21, 0.41)	<0.001
ACEI (7-day gap)	69,639	*****	*****	*****	*****	6.62	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 41. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (7-day gap, history of ARBs (-183, -1))	49,140	*****	*****	*****	*****	2.85	*****	-0.19	*****	0.87 (0.63, 1.20)	0.388
ARBs (7-day gap)	337,083	*****	*****	*****	*****	3.04	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (7-day gap, history of ARBs (-183, -1))	49,137	*****	*****	*****	*****	3.48	*****	0	*****	1.00 (0.60, 1.66)	1
ARBs (7-day gap)	49,137	*****	*****	*****	*****	3.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (7-day gap, history of ARBs (-183, -1))	49,137	*****	*****	*****	*****	2.85	*****	-0.1	*****	0.91 (0.61, 1.35)	0.626
ARBs (7-day gap)	49,137	*****	*****	*****	*****	2.95	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 42. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	0.86	*****				
ACEI (14-day gap)	694,882	*****	*****	*****	*****	2	*****	-1.14	*****	0.42 (0.27, 0.64)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	1.07	*****				
ACEI (14-day gap)	69,639	*****	*****	*****	*****	3	*****	-1.93	*****	0.36 (0.20, 0.64)	<0.001
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	69,639	*****	*****	*****	*****	0.86	*****				
ACEI (14-day gap)	69,639	*****	*****	*****	*****	1.86	*****	-0.99	*****	0.44 (0.27, 0.73)	0.001

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 43. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (-183, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	69,556	*****	*****	*****	*****	0.82	*****	-1.1	*****	0.41 (0.26, 0.65)	<0.001
ACEI (14-day gap)	694,018	*****	*****	*****	*****	1.93	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	69,556	*****	*****	*****	*****	1	*****	-1.86	*****	0.35 (0.19, 0.64)	<0.001
ACEI (14-day gap)	69,556	*****	*****	*****	*****	2.86	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	69,556	*****	*****	*****	*****	0.82	*****	-0.97	*****	0.44 (0.26, 0.73)	0.002
ACEI (14-day gap)	69,556	*****	*****	*****	*****	1.79	*****				
Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	83	*****	*****	*****	*****	34.92	*****	-40.45	*****	0.54 (0.07, 4.00)	0.547
ACEI (14-day gap)	864	*****	*****	*****	*****	75.37	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	68	*****	*****	*****	*****	80.52	*****	0	*****	1.00 (0.06, 15.99)	1
ACEI (14-day gap)	68	*****	*****	*****	*****	80.52	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	68	*****	*****	*****	*****	43.22	*****	-4.54	*****	1.06 (0.07, 16.94)	0.967
ACEI (14-day gap)	68	*****	*****	*****	*****	47.76	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 44. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (ever, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	69,145	*****	*****	*****	*****	0.83	*****	-0.92	*****	0.46 (0.29, 0.72)	<0.001
ACEI (14-day gap)	687,565	*****	*****	*****	*****	1.75	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	69,144	*****	*****	*****	*****	1.01	*****	-1.58	*****	0.39 (0.21, 0.72)	0.003
ACEI (14-day gap)	69,144	*****	*****	*****	*****	2.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	69,144	*****	*****	*****	*****	0.83	*****	-0.77	*****	0.49 (0.29, 0.84)	0.009
ACEI (14-day gap)	69,144	*****	*****	*****	*****	1.59	*****				
Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	494	*****	*****	*****	*****	6.3	*****	-22.43	*****	0.22 (0.03, 1.56)	0.128
ACEI (14-day gap)	7,317	*****	*****	*****	*****	28.73	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	487	*****	*****	*****	*****	11.83	*****	-23.66	*****	0.33 (0.03, 3.20)	0.341
ACEI (14-day gap)	487	*****	*****	*****	*****	35.49	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	487	*****	*****	*****	*****	6.38	*****	-16.84	*****	0.28 (0.03, 2.48)	0.251
ACEI (14-day gap)	487	*****	*****	*****	*****	23.22	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 45. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Serious Allergies

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	61,592	*****	*****	*****	*****	0.83	*****	-1.02	*****	0.43 (0.27, 0.69)	<0.001
ACEI (14-day gap)	583,922	*****	*****	*****	*****	1.85	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	61,582	*****	*****	*****	*****	0.96	*****	-1.52	*****	0.39 (0.20, 0.75)	0.005
ACEI (14-day gap)	61,582	*****	*****	*****	*****	2.48	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	61,582	*****	*****	*****	*****	0.83	*****	-0.8	*****	0.48 (0.28, 0.84)	0.01
ACEI (14-day gap)	61,582	*****	*****	*****	*****	1.63	*****				
Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	8,047	*****	*****	*****	*****	1.15	*****	-1.77	*****	0.39 (0.12, 1.22)	0.105
ACEI (14-day gap)	110,960	*****	*****	*****	*****	2.92	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	8,038	*****	*****	*****	*****	1.38	*****	-3.45	*****	0.29 (0.06, 1.38)	0.118
ACEI (14-day gap)	8,038	*****	*****	*****	*****	4.84	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	8,038	*****	*****	*****	*****	1.15	*****	-1.88	*****	0.37 (0.10, 1.36)	0.135
ACEI (14-day gap)	8,038	*****	*****	*****	*****	3.03	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 46. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Sex

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	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% Confidence Interval)	Wald P-Value	
Sex: Male											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	48,440	*****	*****	*****	*****	1	*****	-0.58	*****	0.60 (0.37, 0.99)	0.044
ACEI (14-day gap)	353,015	*****	*****	*****	*****	1.57	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	48,398	*****	*****	*****	*****	1.02	*****	-1.13	*****	0.48 (0.22, 1.01)	0.053
ACEI (14-day gap)	48,398	*****	*****	*****	*****	2.15	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	48,398	*****	*****	*****	*****	1	*****	-0.44	*****	0.66 (0.36, 1.19)	0.166
ACEI (14-day gap)	48,398	*****	*****	*****	*****	1.43	*****				
Sex: Female											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	21,199	*****	*****	*****	*****	0.55	*****	-1.9	*****	0.22 (0.08, 0.59)	0.002
ACEI (14-day gap)	341,867	*****	*****	*****	*****	2.45	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	21,198	*****	*****	*****	*****	0.74	*****	-2.22	*****	0.25 (0.07, 0.89)	0.032
ACEI (14-day gap)	21,198	*****	*****	*****	*****	2.96	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	21,198	*****	*****	*****	*****	0.55	*****	-1.32	*****	0.28 (0.09, 0.85)	0.024
ACEI (14-day gap)	21,198	*****	*****	*****	*****	1.87	*****				

¹Conditional analysis accounts for informative events and person-time.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 47. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 18-44 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	2,412	*****	*****	*****	*****	0	*****	-3.36	*****	-	-
ACEI (14-day gap)	21,587	*****	*****	*****	*****	3.36	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	2,385	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	2,385	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	2,385	*****	*****	*****	*****	0	*****	-1.24	*****	-	-
ACEI (14-day gap)	2,385	*****	*****	*****	*****	1.24	*****				
Age Group: 45-54 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	5,115	*****	*****	*****	*****	1.17	*****	-1.62	*****	0.45 (0.11, 1.84)	0.264
ACEI (14-day gap)	45,057	*****	*****	*****	*****	2.79	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	5,075	*****	*****	*****	*****	1.09	*****	-1.09	*****	0.50 (0.05, 5.51)	0.571
ACEI (14-day gap)	5,075	*****	*****	*****	*****	2.17	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	5,075	*****	*****	*****	*****	1.18	*****	-0.43	*****	0.68 (0.11, 4.05)	0.669
ACEI (14-day gap)	5,075	*****	*****	*****	*****	1.61	*****				

Table 47. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²	
Age Group: 55-64 Years												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	11,494	*****	*****	*****	*****	1.83	*****		-1.41	*****	0.57 (0.27, 1.22)	0.148
ACEI (14-day gap)	97,244	*****	*****	*****	*****	3.25	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	11,435	*****	*****	*****	*****	1.88	*****		-4.22	*****	0.31 (0.10, 0.94)	0.039
ACEI (14-day gap)	11,435	*****	*****	*****	*****	6.1	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	11,435	*****	*****	*****	*****	1.84	*****		-2.15	*****	0.45 (0.19, 1.07)	0.071
ACEI (14-day gap)	11,435	*****	*****	*****	*****	4	*****					
Age Group: 65+ Years												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	50,618	*****	*****	*****	*****	0.67	*****		-1.03	*****	0.38 (0.21, 0.67)	<0.001
ACEI (14-day gap)	530,994	*****	*****	*****	*****	1.69	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	50,470	*****	*****	*****	*****	0.77	*****		-1.53	*****	0.33 (0.15, 0.74)	0.007
ACEI (14-day gap)	50,470	*****	*****	*****	*****	2.3	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	50,470	*****	*****	*****	*****	0.67	*****		-0.63	*****	0.48 (0.24, 0.94)	0.034
ACEI (14-day gap)	50,470	*****	*****	*****	*****	1.3	*****					

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

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Table 48. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²	
Race: Unknown												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	11,656	*****	*****	*****	*****	0.25	*****		-1.68	*****	0.13 (0.02, 0.92)	0.041
ACEI (14-day gap)	99,645	*****	*****	*****	*****	1.93	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	11,647	*****	*****	*****	*****	0.45	*****		-0.45	*****	0.50 (0.05, 5.51)	0.571
ACEI (14-day gap)	11,647	*****	*****	*****	*****	0.91	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	11,647	*****	*****	*****	*****	0.25	*****		-1.06	*****	0.20 (0.02, 1.63)	0.132
ACEI (14-day gap)	11,647	*****	*****	*****	*****	1.31	*****					
Race: American Indian												
Site-Adjusted Analysis												
SV (14-day gap, history of ACEI (-183, -1))	242	*****	*****	*****	*****	0	*****		0	*****	-	-
ACEI (14-day gap)	4,525	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹												
SV (14-day gap, history of ACEI (-183, -1))	234	*****	*****	*****	*****	0	*****		0	*****	-	-
ACEI (14-day gap)	234	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
SV (14-day gap, history of ACEI (-183, -1))	234	*****	*****	*****	*****	0	*****		0	*****	-	-
ACEI (14-day gap)	234	*****	*****	*****	*****	0	*****					

Table 48. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Asian											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	666	*****	*****	*****	*****	0	*****				
ACEI (14-day gap)	7,871	*****	*****	*****	*****	0.99	*****	-0.99	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	656	*****	*****	*****	*****	0	*****				
ACEI (14-day gap)	656	*****	*****	*****	*****	8.2	*****	-8.2	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	656	*****	*****	*****	*****	0	*****				
ACEI (14-day gap)	656	*****	*****	*****	*****	3.98	*****	-3.98	*****	-	-
Race: Black											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	9,015	*****	*****	*****	*****	2.61	*****				
ACEI (14-day gap)	92,098	*****	*****	*****	*****	7.35	*****	-4.74	*****	0.34 (0.16, 0.73)	0.005
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	8,997	*****	*****	*****	*****	3.33	*****				
ACEI (14-day gap)	8,997	*****	*****	*****	*****	6.67	*****	-3.33	*****	0.50 (0.17, 1.46)	0.206
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	8,997	*****	*****	*****	*****	2.62	*****				
ACEI (14-day gap)	8,997	*****	*****	*****	*****	5.02	*****	-2.4	*****	0.50 (0.20, 1.21)	0.125

Table 48. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Pacific Islander											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	66	*****	*****	*****	*****	0	*****	-3.59	*****	-	-
ACEI (14-day gap)	741	*****	*****	*****	*****	3.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	59	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	59	*****	*****	*****	*****	0	*****	0	*****	-	-
ACEI (14-day gap)	59	*****	*****	*****	*****	0	*****				
Race: White											
Site-Adjusted Analysis											
SV (14-day gap, history of ACEI (-183, -1))	47,994	*****	*****	*****	*****	0.75	*****	-0.46	*****	0.60 (0.34, 1.04)	0.069
ACEI (14-day gap)	490,002	*****	*****	*****	*****	1.21	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ACEI (-183, -1))	47,950	*****	*****	*****	*****	0.79	*****	-1.19	*****	0.40 (0.18, 0.91)	0.028
ACEI (14-day gap)	47,950	*****	*****	*****	*****	1.99	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ACEI (-183, -1))	47,950	*****	*****	*****	*****	0.75	*****	-0.51	*****	0.56 (0.29, 1.10)	0.091
ACEI (14-day gap)	47,950	*****	*****	*****	*****	1.26	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

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Table 49. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	49,140	*****	*****	*****	*****	0.53	*****				
ARBs (14-day gap)	337,083	*****	*****	*****	*****	0.9	*****	-0.36	*****	0.57 (0.29, 1.12)	0.101
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	49,137	*****	*****	*****	*****	0.78	*****				
ARBs (14-day gap)	49,137	*****	*****	*****	*****	0.97	*****	-0.19	*****	0.80 (0.32, 2.03)	0.638
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	49,137	*****	*****	*****	*****	0.53	*****				
ARBs (14-day gap)	49,137	*****	*****	*****	*****	0.86	*****	-0.33	*****	0.59 (0.27, 1.31)	0.193

¹Conditional analysis accounts for informative events and person-time.

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Table 50. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (-183, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
No Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	49,082	*****	*****	*****	*****	0.53	*****	-0.24	*****	0.66 (0.34, 1.31)	0.234
ARBs (14-day gap)	336,258	*****	*****	*****	*****	0.78	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	49,079	*****	*****	*****	*****	0.78	*****	0	*****	1.00 (0.38, 2.66)	1
ARBs (14-day gap)	49,079	*****	*****	*****	*****	0.78	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	49,079	*****	*****	*****	*****	0.53	*****	-0.24	*****	0.67 (0.30, 1.50)	0.329
ARBs (14-day gap)	49,079	*****	*****	*****	*****	0.77	*****				
Angioedema (-183, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	58	*****	*****	*****	*****	0	*****	-52.37	*****	-	-
ARBs (14-day gap)	825	*****	*****	*****	*****	52.37	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	55	*****	*****	*****	*****	0	*****	-186.22	*****	-	-
ARBs (14-day gap)	55	*****	*****	*****	*****	186.22	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	55	*****	*****	*****	*****	0	*****	-74.99	*****	-	-
ARBs (14-day gap)	55	*****	*****	*****	*****	74.99	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

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Table 51. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Prior Angioedema (ever, -1)

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
No Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	48,390	*****	*****	*****	*****	0.54	*****	-0.14	*****	0.77 (0.39, 1.53)	0.459
ARBs (14-day gap)	329,726	*****	*****	*****	*****	0.68	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	48,383	*****	*****	*****	*****	0.79	*****	0.2	*****	1.33 (0.46, 3.84)	0.594
ARBs (14-day gap)	48,383	*****	*****	*****	*****	0.59	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	48,383	*****	*****	*****	*****	0.54	*****	-0.15	*****	0.76 (0.33, 1.74)	0.515
ARBs (14-day gap)	48,383	*****	*****	*****	*****	0.69	*****				
Angioedema (ever, -1)											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	750	*****	*****	*****	*****	0	*****	-10.71	*****	-	-
ARBs (14-day gap)	7,357	*****	*****	*****	*****	10.71	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	744	*****	*****	*****	*****	0	*****	-19.05	*****	-	-
ARBs (14-day gap)	744	*****	*****	*****	*****	19.05	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	744	*****	*****	*****	*****	0	*****	-8.72	*****	-	-
ARBs (14-day gap)	744	*****	*****	*****	*****	8.72	*****				

¹Conditional analysis accounts for informative events and person-time.

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Table 52. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Serious Allergies

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
No Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	42,674	*****	*****	*****	*****	0.54	*****	-0.15	*****	0.74 (0.36, 1.53)	0.418
ARBs (14-day gap)	282,648	*****	*****	*****	*****	0.69	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	42,666	*****	*****	*****	*****	0.77	*****	0.11	*****	1.17 (0.39, 3.47)	0.782
ARBs (14-day gap)	42,666	*****	*****	*****	*****	0.66	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	42,666	*****	*****	*****	*****	0.54	*****	-0.09	*****	0.84 (0.34, 2.05)	0.7
ARBs (14-day gap)	42,666	*****	*****	*****	*****	0.62	*****				
Serious allergies											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	6,466	*****	*****	*****	*****	0.5	*****	-1.61	*****	0.23 (0.03, 1.68)	0.147
ARBs (14-day gap)	54,435	*****	*****	*****	*****	2.11	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	6,436	*****	*****	*****	*****	0.84	*****	-1.69	*****	0.33 (0.03, 3.20)	0.341
ARBs (14-day gap)	6,436	*****	*****	*****	*****	2.53	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	6,436	*****	*****	*****	*****	0.5	*****	-1.42	*****	0.25 (0.03, 2.11)	0.201
ARBs (14-day gap)	6,436	*****	*****	*****	*****	1.92	*****				

¹Conditional analysis accounts for informative events and person-time.

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Table 53. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Sex

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval)	Wald P-Value
Sex: Male											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	29,914	*****	*****	*****	*****	0.29	*****				
ARBs (14-day gap)	149,212	*****	*****	*****	*****	0.9	*****	-0.61	*****	0.31 (0.10, 0.98)	0.045
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	29,883	*****	*****	*****	*****	0.48	*****				
ARBs (14-day gap)	29,883	*****	*****	*****	*****	0.8	*****	-0.32	*****	0.60 (0.14, 2.51)	0.484
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	29,883	*****	*****	*****	*****	0.29	*****				
ARBs (14-day gap)	29,883	*****	*****	*****	*****	0.83	*****	-0.55	*****	0.33 (0.09, 1.20)	0.092
Sex: Female											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	19,226	*****	*****	*****	*****	0.93	*****				
ARBs (14-day gap)	187,871	*****	*****	*****	*****	0.89	*****	0.03	*****	0.98 (0.43, 2.26)	0.971
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	19,218	*****	*****	*****	*****	1.51	*****				
ARBs (14-day gap)	19,218	*****	*****	*****	*****	1	*****	0.5	*****	1.50 (0.42, 5.32)	0.53
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	19,218	*****	*****	*****	*****	0.93	*****				
ARBs (14-day gap)	19,218	*****	*****	*****	*****	0.58	*****	0.35	*****	1.53 (0.47, 5.03)	0.482

¹Conditional analysis accounts for informative events and person-time.

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Table 54. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 18-44 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	1,164	*****	*****	*****	*****	0	*****	-2.74	*****	-	-
ARBs (14-day gap)	8,502	*****	*****	*****	*****	2.74	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	1,154	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	1,154	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	1,154	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	1,154	*****	*****	*****	*****	0	*****				
Age Group: 45-54 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	2,653	*****	*****	*****	*****	0	*****	-2.01	*****	-	-
ARBs (14-day gap)	18,293	*****	*****	*****	*****	2.01	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	2,641	*****	*****	*****	*****	0	*****	-4.24	*****	-	-
ARBs (14-day gap)	2,641	*****	*****	*****	*****	4.24	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	2,641	*****	*****	*****	*****	0	*****	-2.03	*****	-	-
ARBs (14-day gap)	2,641	*****	*****	*****	*****	2.03	*****				

Table 54. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Age Group

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Age Group: 55-64 Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	5,990	*****	*****	*****	*****	1.03	*****				
ARBs (14-day gap)	40,547	*****	*****	*****	*****	1.91	*****	-0.88	*****	0.58 (0.14, 2.44)	0.461
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	5,945	*****	*****	*****	*****	1.79	*****				
ARBs (14-day gap)	5,945	*****	*****	*****	*****	1.79	*****	0	*****	1.00 (0.14, 7.10)	1
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	5,945	*****	*****	*****	*****	1.03	*****				
ARBs (14-day gap)	5,945	*****	*****	*****	*****	0.85	*****	0.19	*****	1.17 (0.16, 8.33)	0.876
Age Group: 65+ Years											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	39,333	*****	*****	*****	*****	0.51	*****				
ARBs (14-day gap)	269,741	*****	*****	*****	*****	0.66	*****	-0.15	*****	0.72 (0.33, 1.55)	0.399
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	39,269	*****	*****	*****	*****	0.7	*****				
ARBs (14-day gap)	39,269	*****	*****	*****	*****	0.94	*****	-0.23	*****	0.75 (0.26, 2.16)	0.594
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	39,269	*****	*****	*****	*****	0.51	*****				
ARBs (14-day gap)	39,269	*****	*****	*****	*****	0.77	*****	-0.26	*****	0.63 (0.25, 1.55)	0.311

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 55. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Unknown											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	8,082	*****	*****	*****	*****	0	*****				
ARBs (14-day gap)	47,793	*****	*****	*****	*****	0.63	*****	-0.63	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	8,026	*****	*****	*****	*****	0	*****				
ARBs (14-day gap)	8,026	*****	*****	*****	*****	1.28	*****	-1.28	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	8,026	*****	*****	*****	*****	0	*****				
ARBs (14-day gap)	8,026	*****	*****	*****	*****	0.59	*****	-0.59	*****	-	-
Race: American Indian											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	133	*****	*****	*****	*****	0	*****				
ARBs (14-day gap)	1,948	*****	*****	*****	*****	1.36	*****	-1.36	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	131	*****	*****	*****	*****	0	*****				
ARBs (14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	131	*****	*****	*****	*****	0	*****				
ARBs (14-day gap)	131	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 55. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Asian											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	1,070	*****	*****	*****	*****	0	*****	-0.54	*****	-	-
ARBs (14-day gap)	7,811	*****	*****	*****	*****	0.54	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	1,026	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	1,026	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	1,026	*****	*****	*****	*****	0	*****	-2.15	*****	-	-
ARBs (14-day gap)	1,026	*****	*****	*****	*****	2.15	*****				
Race: Black											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	6,989	*****	*****	*****	*****	0.97	*****	-1.82	*****	0.33 (0.08, 1.35)	0.122
ARBs (14-day gap)	55,801	*****	*****	*****	*****	2.79	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	6,967	*****	*****	*****	*****	0.82	*****	-2.46	*****	0.25 (0.03, 2.24)	0.215
ARBs (14-day gap)	6,967	*****	*****	*****	*****	3.28	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	6,967	*****	*****	*****	*****	0.97	*****	-1.24	*****	0.39 (0.08, 1.95)	0.253
ARBs (14-day gap)	6,967	*****	*****	*****	*****	2.21	*****				

Table 55. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Race

Medical Product	Number of New Users	Average Person Years at Risk	Average Person Days at Risk	Average Person Years 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% Confidence Interval) ²	Wald P-Value ²
Race: Pacific Islander											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	61	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	478	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	50	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	50	*****	*****	*****	*****	0	*****	0	*****	-	-
ARBs (14-day gap)	50	*****	*****	*****	*****	0	*****				
Race: White											
Site-Adjusted Analysis											
SV (14-day gap, history of ARBs (-183, -1))	32,805	*****	*****	*****	*****	0.6	*****	0.03	*****	1.00 (0.46, 2.19)	0.996
ARBs (14-day gap)	223,252	*****	*****	*****	*****	0.57	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹											
SV (14-day gap, history of ARBs (-183, -1))	32,796	*****	*****	*****	*****	0.83	*****	-0.14	*****	0.86 (0.29, 2.55)	0.782
ARBs (14-day gap)	32,796	*****	*****	*****	*****	0.97	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
SV (14-day gap, history of ARBs (-183, -1))	32,796	*****	*****	*****	*****	0.6	*****	0.07	*****	1.10 (0.40, 3.04)	0.854
ARBs (14-day gap)	32,796	*****	*****	*****	*****	0.53	*****				

¹Conditional analysis accounts for informative events and person-time.

²Data presented by a dash are unable to be calculated. This table may not use all data representations.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Figure 1a. Histograms of Propensity Score Distribution Aggregated, Before Adjustment, Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

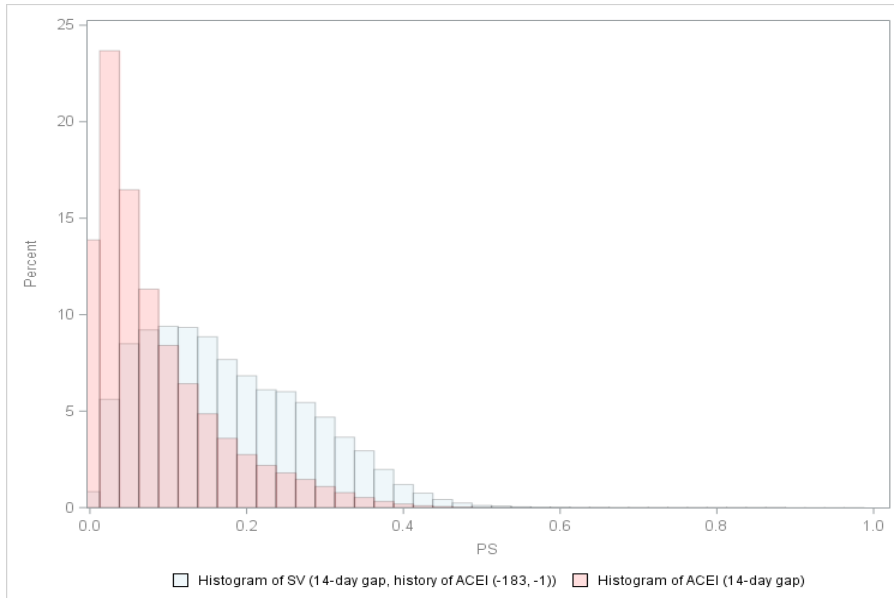


Figure 1b. Histogram of Propensity Score Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

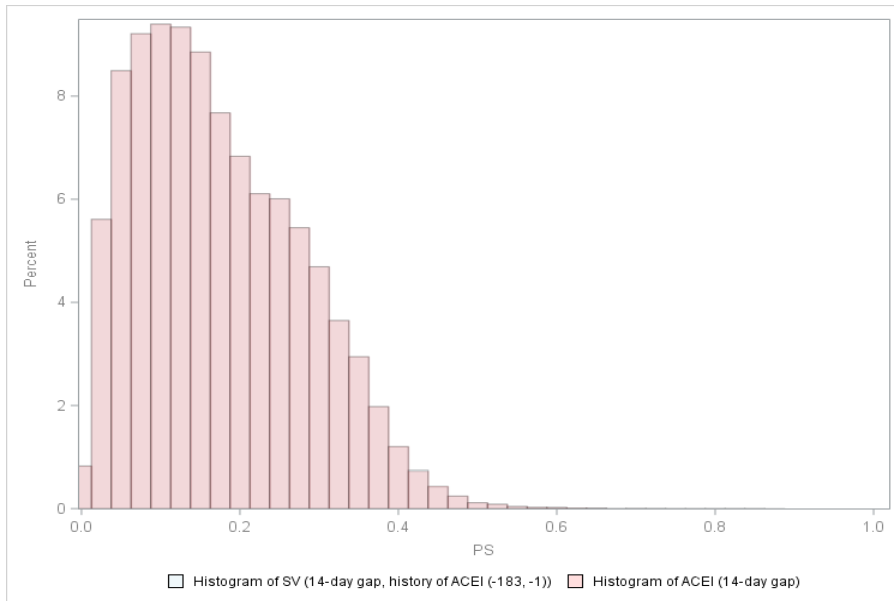


Figure 2a. Histograms of Propensity Score Distribution Aggregated, Before Adjustment, Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

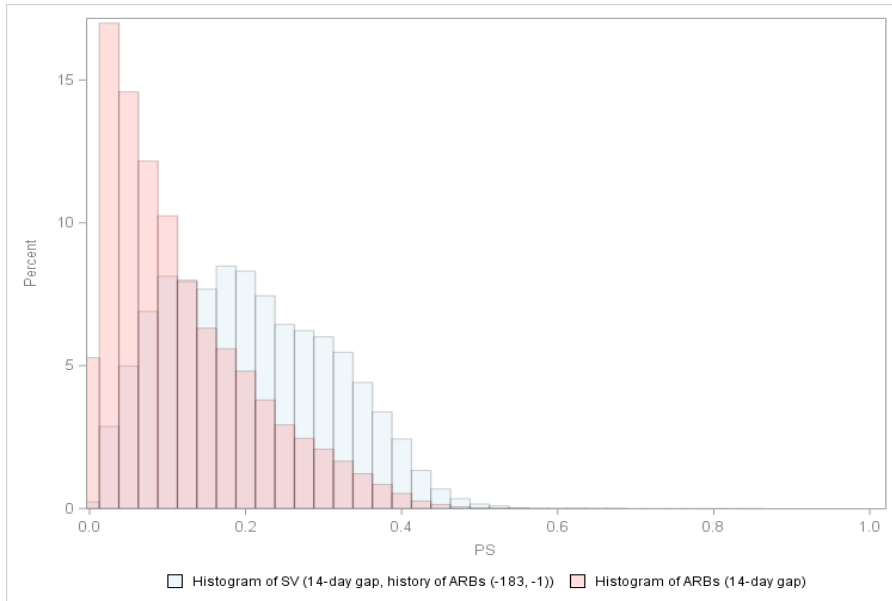


Figure 2b. Histograms of Propensity Score Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

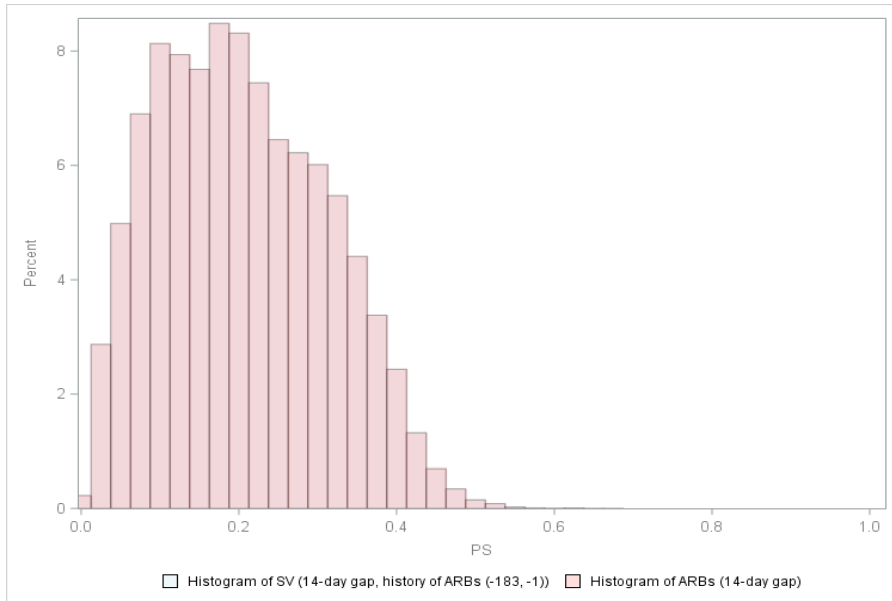


Figure 3a. Histograms of Propensity Score Distribution Aggregated, Before Adjustment, Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

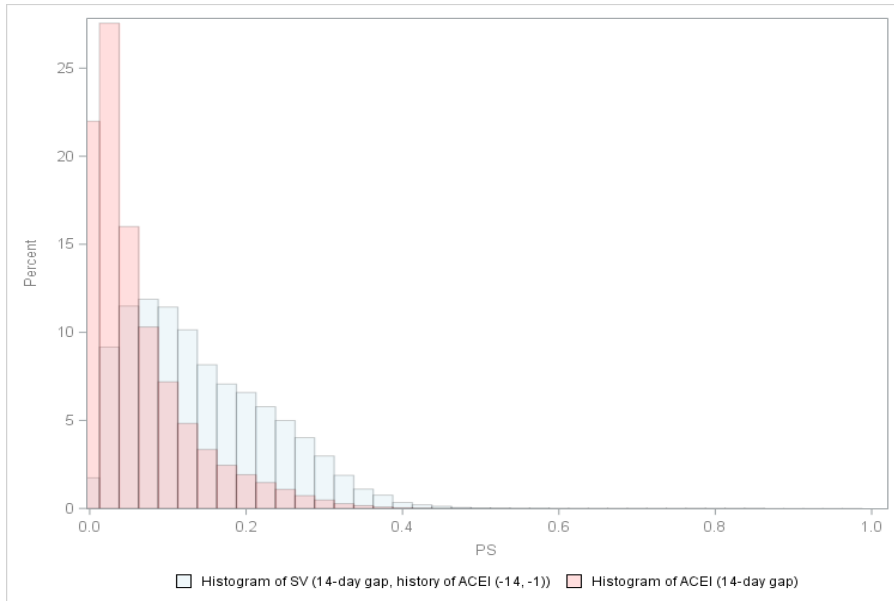


Figure 3b. Histograms of Propensity Score Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

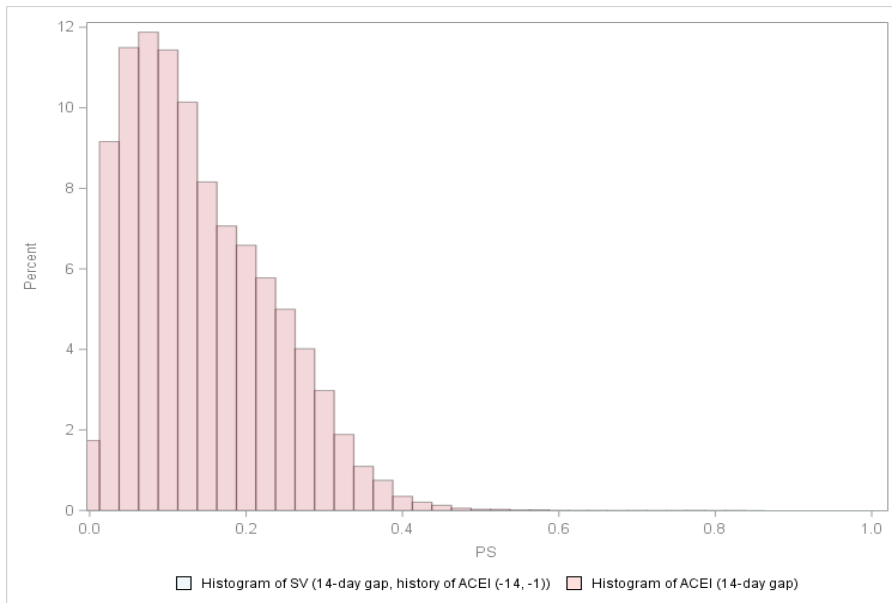


Figure 4a. Histograms of Propensity Score Distribution Aggregated, Before Adjustment, Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

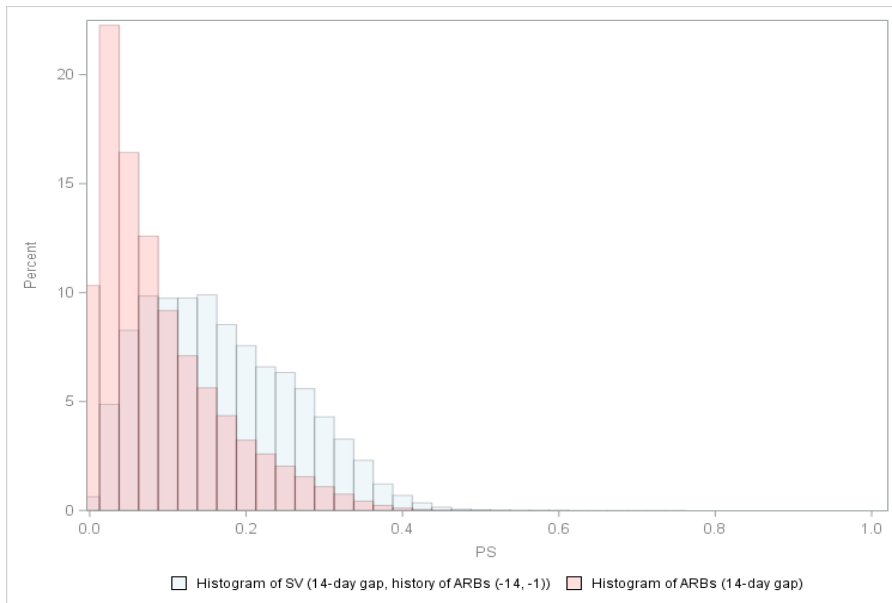


Figure 4b. Histograms of Propensity Score Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

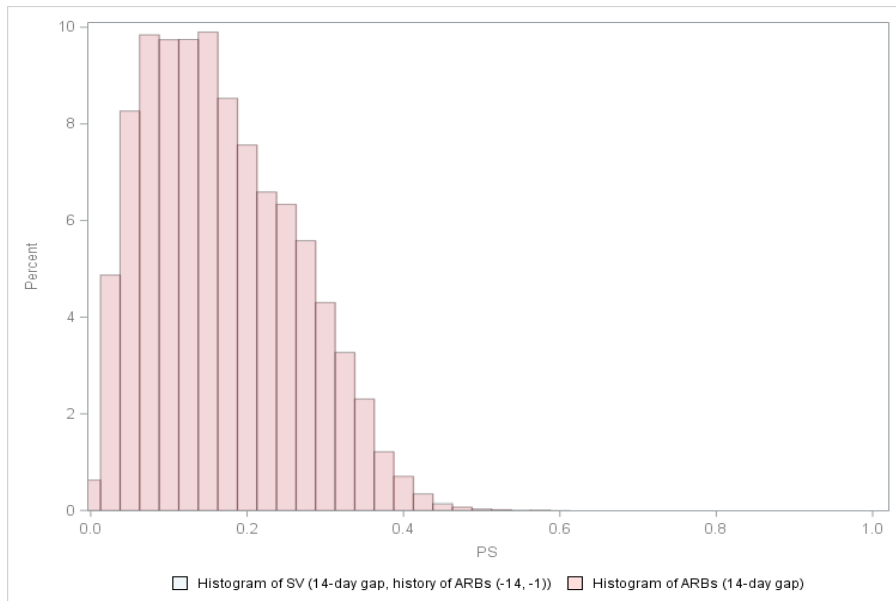


Figure 5a. Histograms of Propensity Score Distribution Aggregated, Before Adjustment, Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

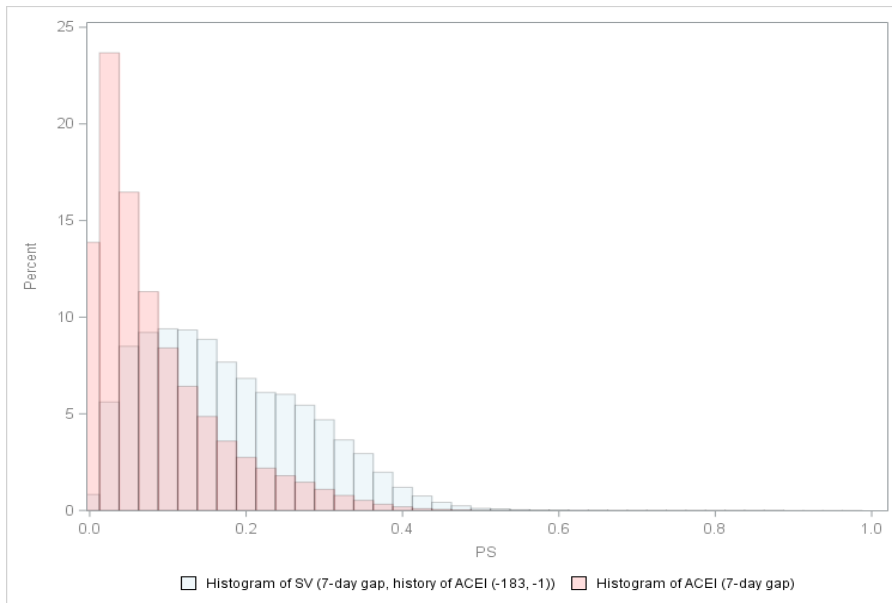


Figure 5b. Histograms of Propensity Score Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

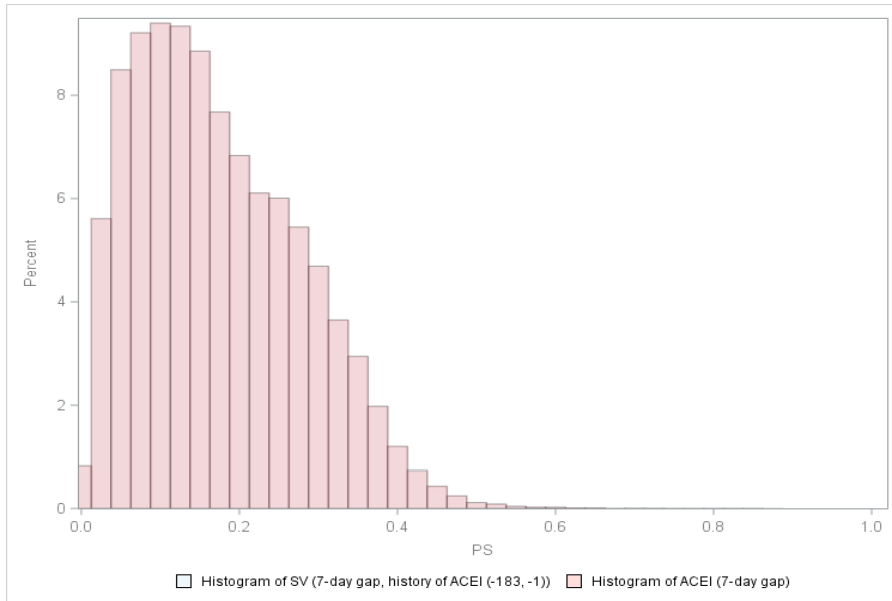


Figure 6a. Histograms of Propensity Score Distribution Aggregated, Before Adjustment, Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

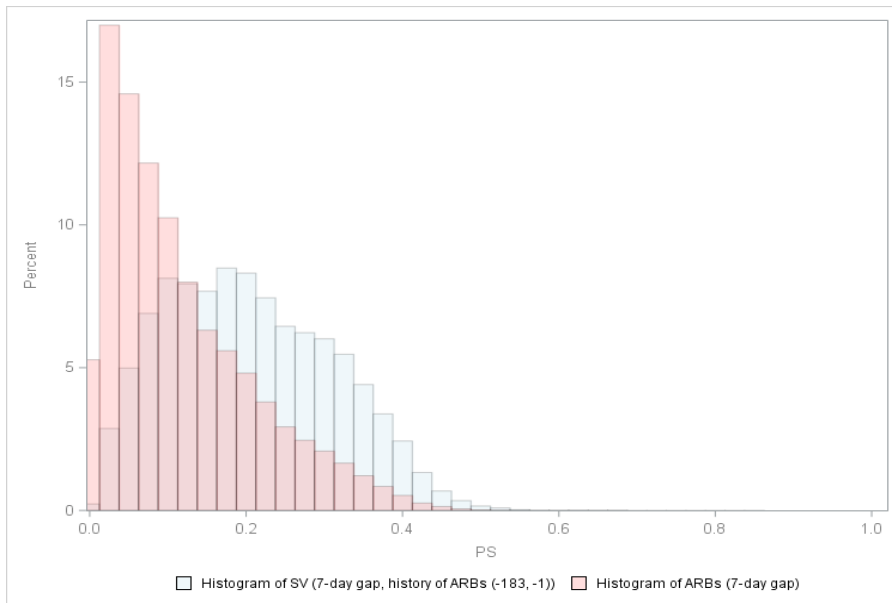


Figure 6b. Histograms of Propensity Score Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

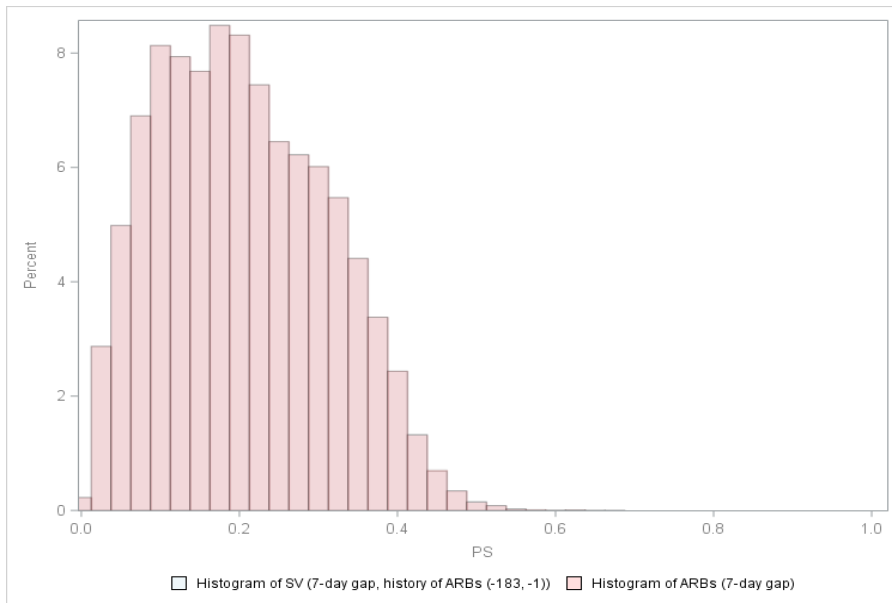


Figure 7. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

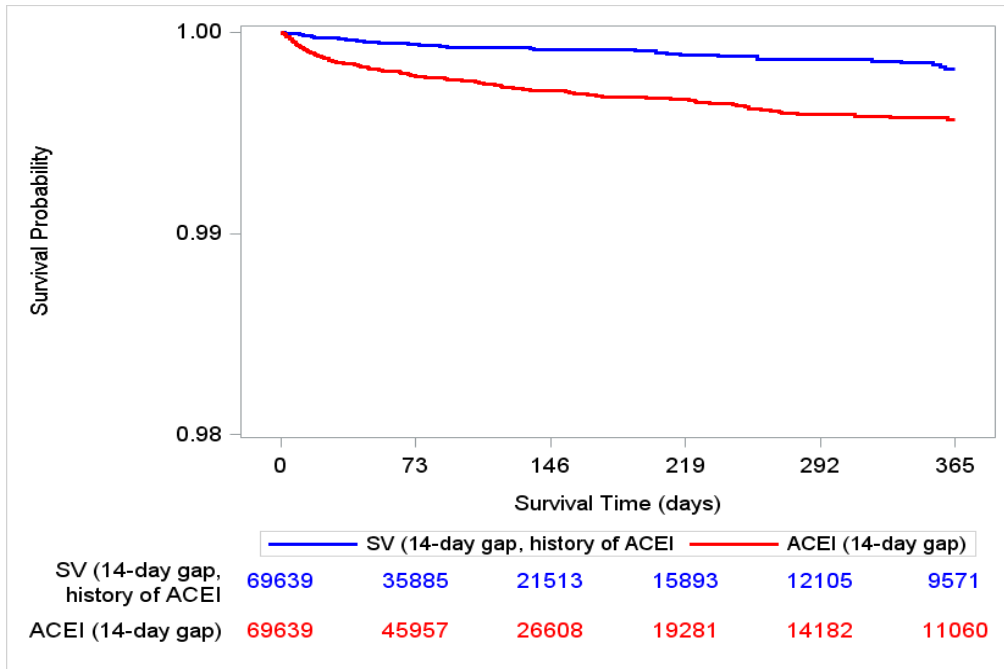


Figure 8. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

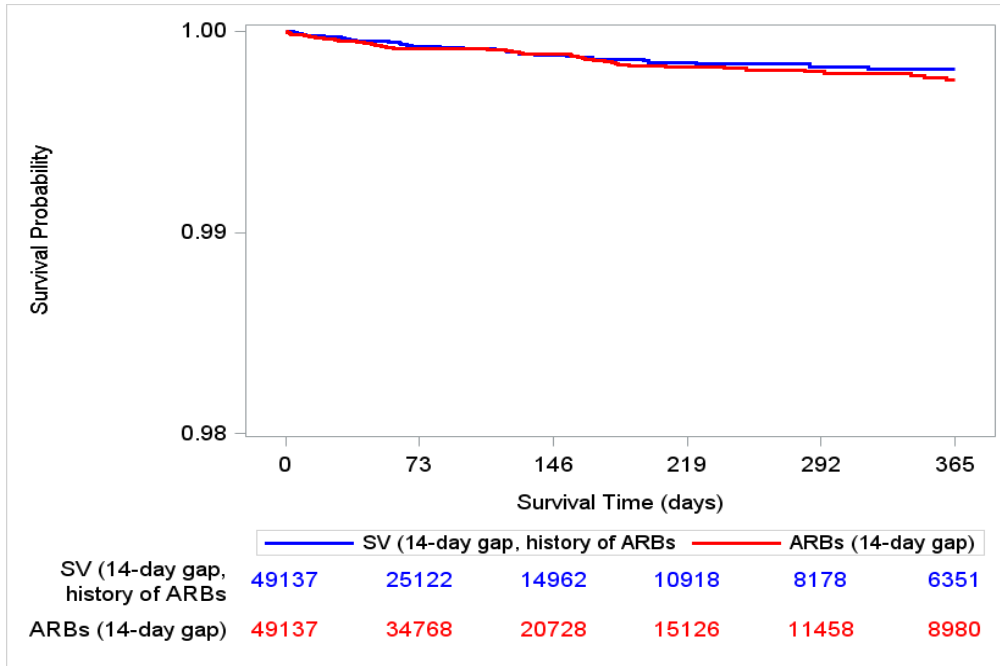


Figure 9. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and ACEI, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

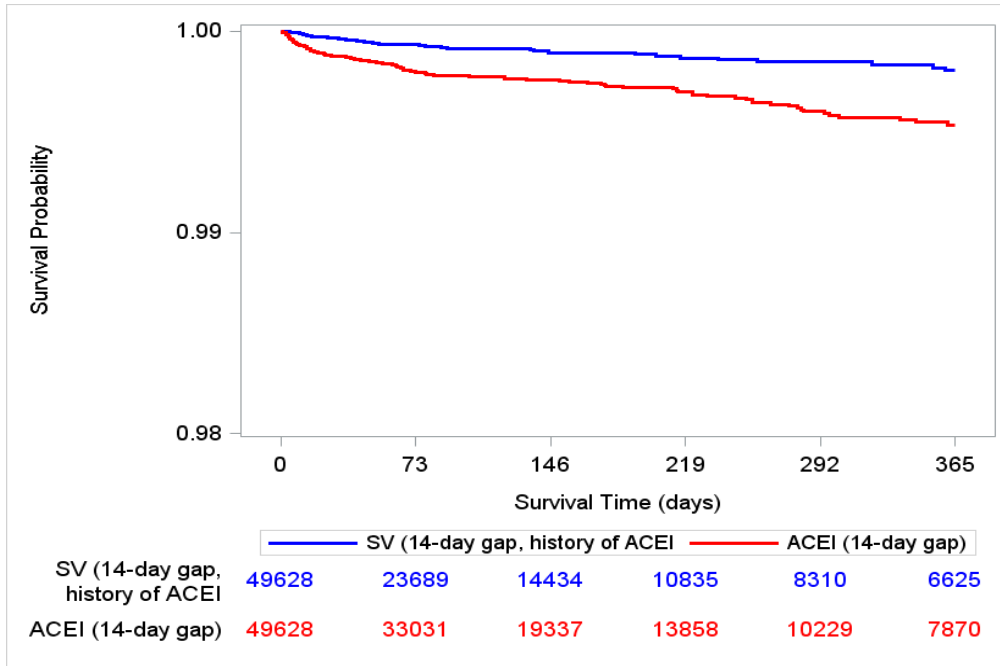


Figure 10. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 14 Days Prior, and ARBs, 14-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

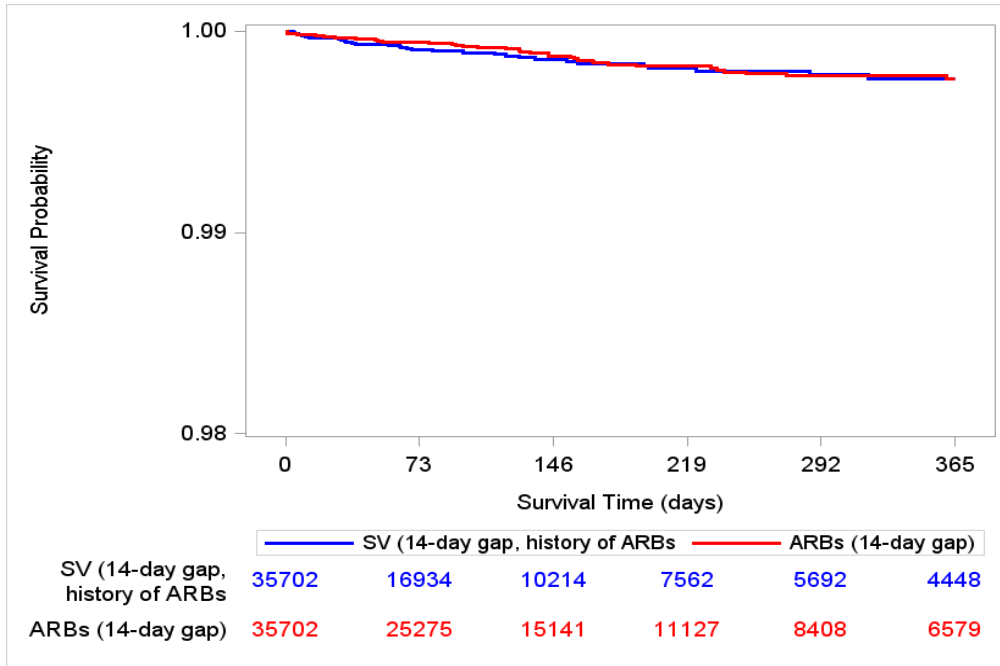


Figure 11. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

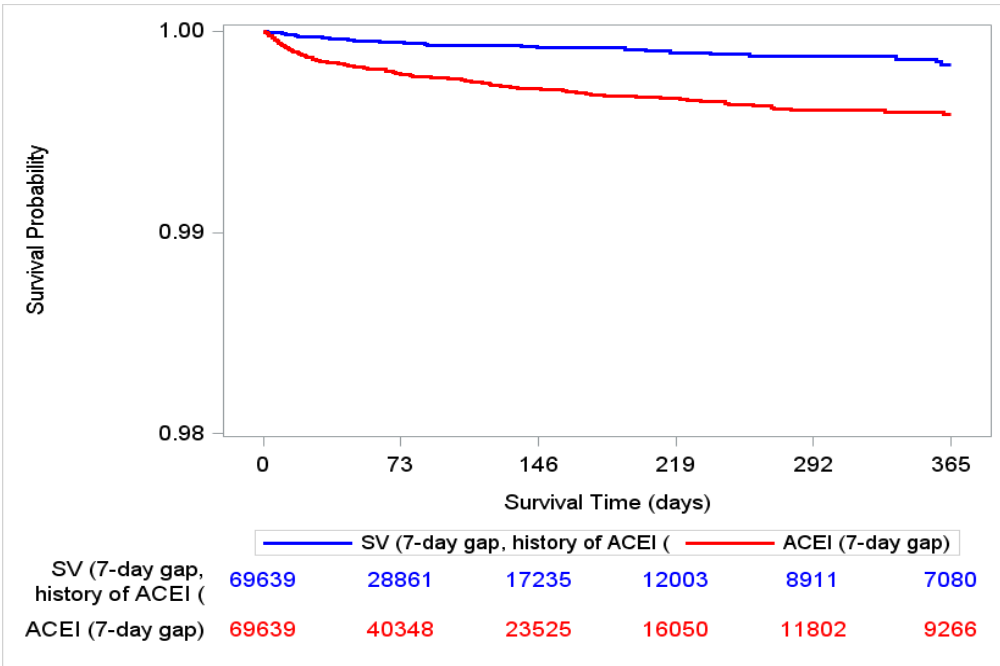


Figure 12. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 7-Day Gap, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

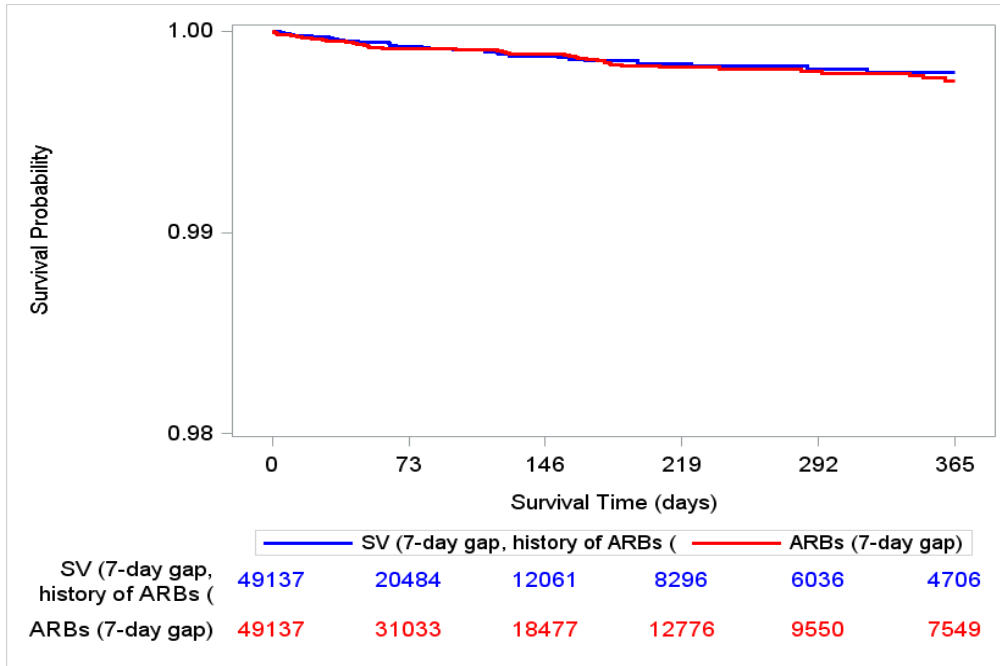


Figure 13. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and ACEI, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Serious Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

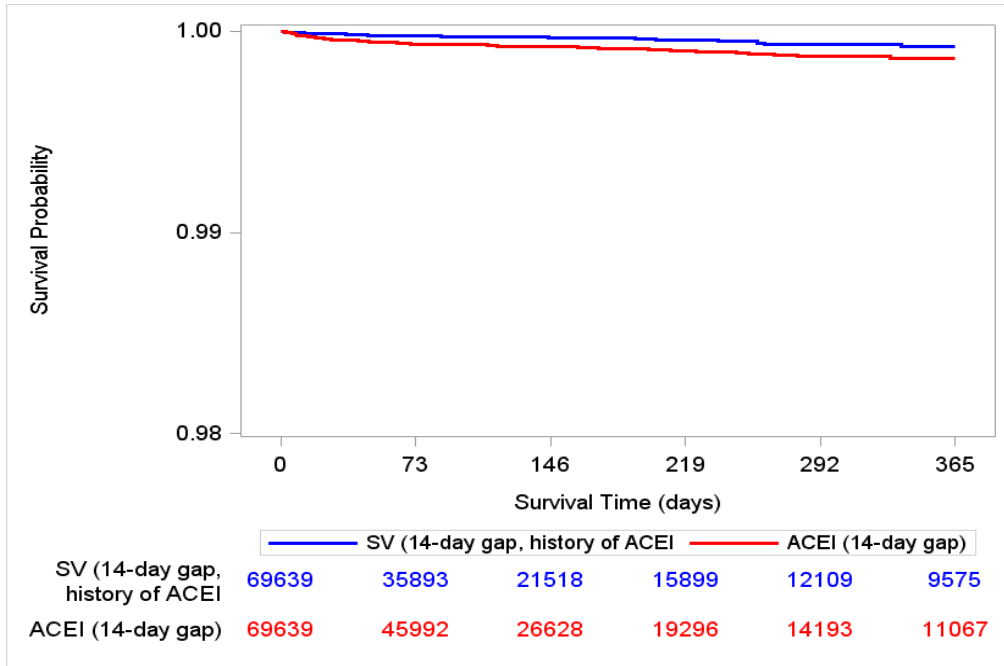


Figure 14. Kaplan Meier Survival Curves for New Initiators of Sacubitril/Valsartan (SV) with use of Angiotensin II Receptor Blockers (ARBs) in the 183 Days Prior, and ARBs, 14-Day Gap, and Risk of Serious Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Serious Angioedema, Unconditional Propensity Score Adjusted Matched Cohort.

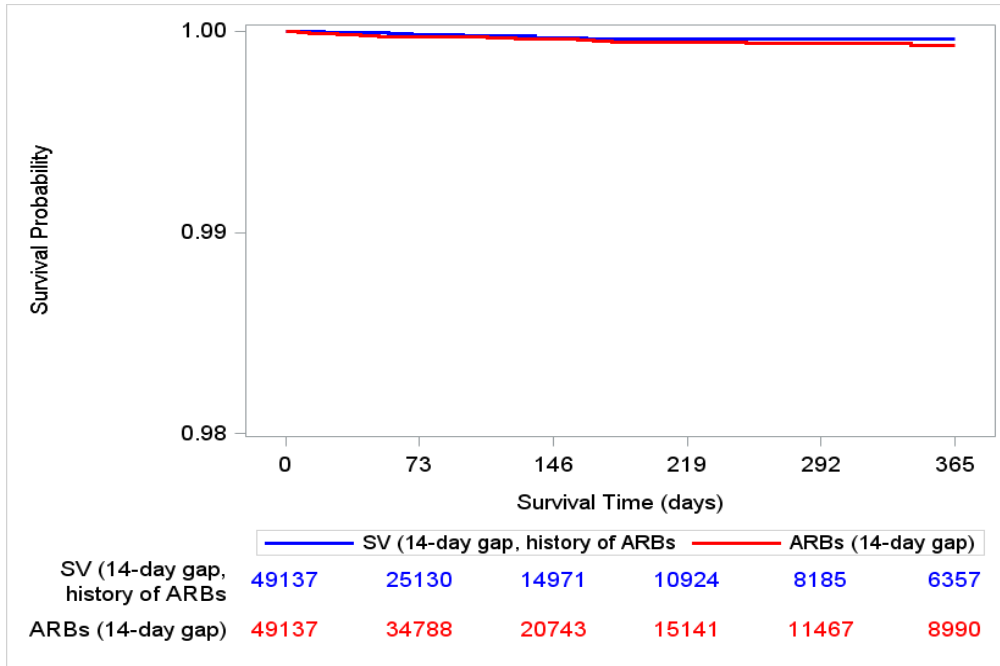


Figure 15. Kaplan Meier Survival Curves for Risk of Angioedema, SV (183 days prior, 14-day gap) and ARBs (183 days prior, 14-day gap)

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort, No Baseline Angioedema (-183, -1)

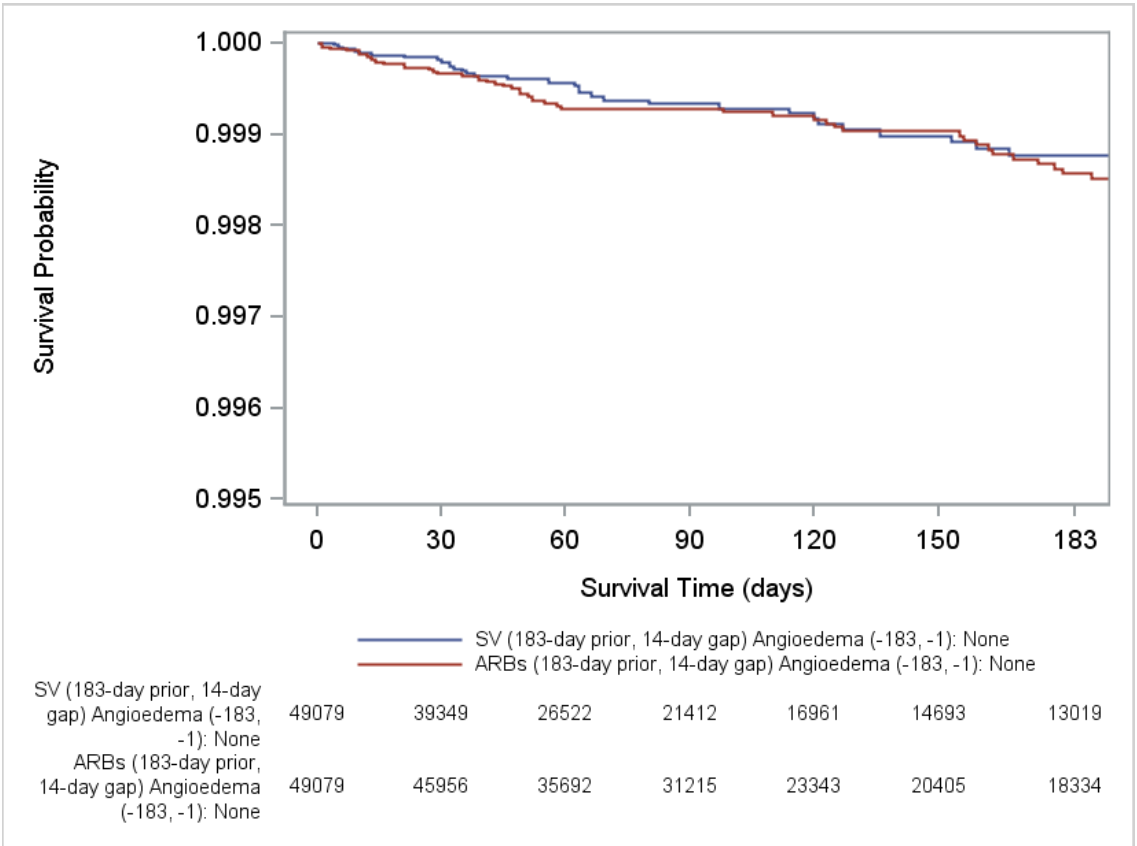
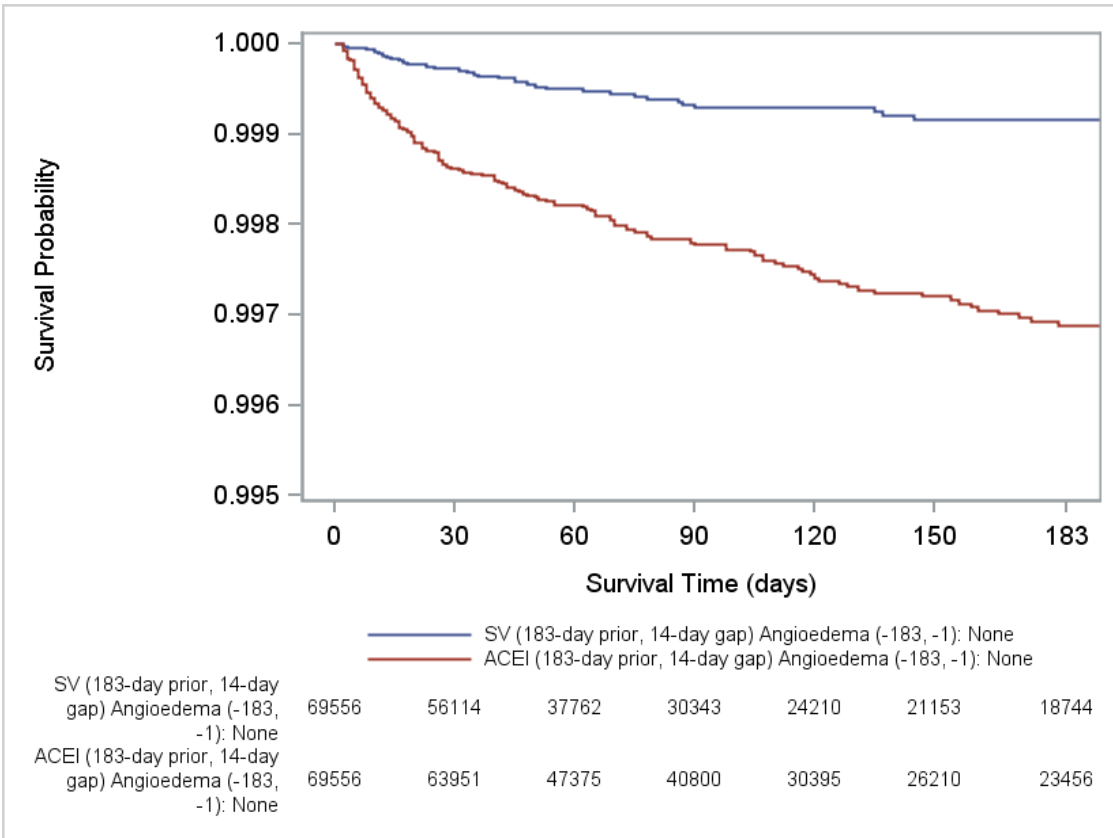


Figure 16. Kaplan Meier Survival Curves for Risk of Angioedema, SV (183 days prior, 14-day gap) and ACEI (183 days prior, 14-day gap)

Kaplan Meier Survival Curves of Events and Followup Time for Risk of Angioedema, Unconditional Propensity Score Adjusted Matched Cohort, Angioedema, No Baseline Angioedema (-183, -1)



Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (January 13, 2021)

DP ID	Start Date¹	End Date¹
DP01	1/1/2010	12/31/2019
DP02	1/1/2008	12/31/2019
DP03	1/1/2008	2/29/2020
DP04	6/1/2007	10/31/2019
DP05	1/1/2006	1/31/2020

¹The start and end dates are based on the minimum and maximum dates within each DP. The month with the maximum date must have at least 80% of the number of records in the previous month.

Appendix B. Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
Angiotensin-Converting Enzyme Inhibitors (ACEI)	
AMLODIPINE BESYLATE/BENAZEPRIL HCL	Lotrel
AMLODIPINE BESYLATE/BENAZEPRIL HCL	amlodipine-benazepril
BENAZEPRIL HCL	Lotensin
BENAZEPRIL HCL	benazepril
BENAZEPRIL HCL/HYDROCHLOROTHIAZIDE	Lotensin HCT
BENAZEPRIL HCL/HYDROCHLOROTHIAZIDE	benazepril-hydrochlorothiazide
CAPTOPRIL	captopril
CAPTOPRIL/HYDROCHLOROTHIAZIDE	captopril-hydrochlorothiazide
ENALAPRIL MALEATE	Epaned
ENALAPRIL MALEATE	Vasotec
ENALAPRIL MALEATE	enalapril maleate
ENALAPRIL MALEATE/HYDROCHLOROTHIAZIDE	Vaseretic
ENALAPRIL MALEATE/HYDROCHLOROTHIAZIDE	enalapril-hydrochlorothiazide
FOSINOPRIL SODIUM	fosinopril
FOSINOPRIL SODIUM/HYDROCHLOROTHIAZIDE	fosinopril-hydrochlorothiazide
LISINOPRIL	Prinivil
LISINOPRIL	Qbrelis
LISINOPRIL	Zestril
LISINOPRIL	lisinopril
LISINOPRIL/HYDROCHLOROTHIAZIDE	Zestoretic
LISINOPRIL/HYDROCHLOROTHIAZIDE	lisinopril-hydrochlorothiazide
MOEXIPRIL HCL	Univasc
MOEXIPRIL HCL	moexipril
MOEXIPRIL HCL/HYDROCHLOROTHIAZIDE	Uniretic
MOEXIPRIL HCL/HYDROCHLOROTHIAZIDE	moexipril-hydrochlorothiazide
PERINDOPRIL ARGININE/AMLODIPINE BESYLATE	Prestalia
PERINDOPRIL ERBUMINE	Aceon
PERINDOPRIL ERBUMINE	perindopril erbumine
QUINAPRIL HCL	Accupril
QUINAPRIL HCL	quinapril
QUINAPRIL HCL/HYDROCHLOROTHIAZIDE	Accuretic
QUINAPRIL HCL/HYDROCHLOROTHIAZIDE	quinapril-hydrochlorothiazide
RAMIPRIL	Altace
RAMIPRIL	ramipril
TRANDOLAPRIL	Mavik
TRANDOLAPRIL	trandolapril
TRANDOLAPRIL/VERAPAMIL HCL	Tarka
TRANDOLAPRIL/VERAPAMIL HCL	trandolapril-verapamil
amlodipine besylate/benazepril HCl	amlodipine-benazepril
benazepril HCl	Lotensin
benazepril HCl	benazepril
captopril	captopril
enalapril maleate	enalapril maleate
lisinopril	lisinopril
lisinopril/hydrochlorothiazide	lisinopril-hydrochlorothiazide
quinapril HCl	quinapril
ramipril	ramipril
trandolapril	trandolapril
Angiotensin II Receptor Blockers (ARB)	

Appendix B. Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
AMLODIPINE BESYLATE/OLMESARTAN MEDOXOMIL	Azor
AMLODIPINE BESYLATE/OLMESARTAN MEDOXOMIL	amlodipine-olmesartan
AMLODIPINE BESYLATE/VALSARTAN	Exforge
AMLODIPINE BESYLATE/VALSARTAN	amlodipine-valsartan
AMLODIPINE BESYLATE/VALSARTAN /HYDROCHLOROTHIAZIDE	Exforge HCT
AMLODIPINE BESYLATE/VALSARTAN /HYDROCHLOROTHIAZIDE	amlodipine-valsartan-hcthiazid
AZILSARTAN MEDOXOMIL	Edarbi
AZILSARTAN MEDOXOMIL/CHLORTHALIDONE	Edarbyclor
CANDESARTAN CILEXETIL	Atacand
CANDESARTAN CILEXETIL	candesartan
CANDESARTAN CILEXETIL/HYDROCHLOROTHIAZIDE	Atacand HCT
CANDESARTAN CILEXETIL/HYDROCHLOROTHIAZIDE	candesartan-hydrochlorothiazid
EPROSARTAN MESYLATE	Teveten
EPROSARTAN MESYLATE	eprosartan
EPROSARTAN MESYLATE/HYDROCHLOROTHIAZIDE	Teveten HCT
IRBESARTAN	Avapro
IRBESARTAN	irbesartan
IRBESARTAN/HYDROCHLOROTHIAZIDE	Avalide
IRBESARTAN/HYDROCHLOROTHIAZIDE	irbesartan-hydrochlorothiazide
LOSARTAN POTASSIUM	Cozaar
LOSARTAN POTASSIUM	losartan
LOSARTAN POTASSIUM/HYDROCHLOROTHIAZIDE	Hyzaar
LOSARTAN POTASSIUM/HYDROCHLOROTHIAZIDE	losartan-hydrochlorothiazide
NEBIVOLOL HCL/VALSARTAN	Byvalson
OLMESARTAN MEDOXOMIL	Benicar
OLMESARTAN MEDOXOMIL	olmesartan
OLMESARTAN MEDOXOMIL/AMLODIPINE	Tribenzor
BESYLATE/HYDROCHLOROTHIAZIDE	
OLMESARTAN MEDOXOMIL/AMLODIPINE	olmesartan-amlodipin-hcthiazid
BESYLATE/HYDROCHLOROTHIAZIDE	
OLMESARTAN MEDOXOMIL/HYDROCHLOROTHIAZIDE	Benicar HCT
OLMESARTAN MEDOXOMIL/HYDROCHLOROTHIAZIDE	olmesartan-hydrochlorothiazide
TELMISARTAN	Micardis
TELMISARTAN	telmisartan
TELMISARTAN/AMLODIPINE BESYLATE	Twynsta
TELMISARTAN/AMLODIPINE BESYLATE	telmisartan-amlodipine
TELMISARTAN/HYDROCHLOROTHIAZIDE	Micardis HCT
TELMISARTAN/HYDROCHLOROTHIAZIDE	telmisartan-hydrochlorothiazid
VALSARTAN	Diovan
VALSARTAN	valsartan
VALSARTAN/HYDROCHLOROTHIAZIDE	Diovan HCT
VALSARTAN/HYDROCHLOROTHIAZIDE	valsartan-hydrochlorothiazide
amlodipine besylate/olmesartan medoxomil	amlodipine-olmesartan
amlodipine besylate/valsartan	amlodipine-valsartan
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiazid
candesartan cilexetil	Atacand
candesartan cilexetil	candesartan
candesartan cilexetil/hydrochlorothiazide	Atacand HCT
candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
irbesartan	irbesartan
irbesartan/hydrochlorothiazide	irbesartan-hydrochlorothiazide

Appendix B. Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
losartan potassium	losartan
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide
olmesartan medoxomil	Benicar
olmesartan medoxomil	olmesartan
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	olmesartan-amlodipin-hcthiazid
olmesartan medoxomil/hydrochlorothiazide	Benicar HCT
telmisartan	telmisartan
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
valsartan	valsartan
valsartan/hydrochlorothiazide	valsartan-hydrochlorothiazide
Sacubitril/Valsartan	
SACUBITRIL/VALSARTAN	Entresto

Appendix C. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Outcome in this Request

Code	Description	Code Category	Code Type
Intensive Care Unit Admission, Intubation, Tracheostomy, or Laryngoscopy			
09HN7BZ	Insertion of Airway into Nasopharynx, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
9HN8BZ	Insertion of Airway into Nasopharynx, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
B110F4	Bypass Trachea to Cutaneous with Tracheostomy Device, Open Approach	Procedure	ICD-10-PCS
0B110Z4	Bypass Trachea to Cutaneous, Open Approach	Procedure	ICD-10-PCS
0B113F4	Bypass Trachea to Cutaneous with Tracheostomy Device, Percutaneous Approach	Procedure	ICD-10-PCS
0B113Z4	Bypass Trachea to Cutaneous, Percutaneous Approach	Procedure	ICD-10-PCS
	Bypass Trachea to Cutaneous with Tracheostomy Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0B114F4			
0B114Z4	Bypass Trachea to Cutaneous, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0B710DZ	Dilation of Trachea with Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
0B710ZZ	Dilation of Trachea, Open Approach	Procedure	ICD-10-PCS
0B713DZ	Dilation of Trachea with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
0B713ZZ	Dilation of Trachea, Percutaneous Approach	Procedure	ICD-10-PCS
0B714DZ	Dilation of Trachea with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0B714ZZ	Dilation of Trachea, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0B717DZ	Dilation of Trachea with Intraluminal Device, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0B717ZZ	Dilation of Trachea, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Dilation of Trachea with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0B718DZ			
0B718ZZ	Dilation of Trachea, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0B720DZ	Dilation of Carina with Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
0B720ZZ	Dilation of Carina, Open Approach	Procedure	ICD-10-PCS
0B723DZ	Dilation of Carina with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
0B723ZZ	Dilation of Carina, Percutaneous Approach	Procedure	ICD-10-PCS
0B724DZ	Dilation of Carina with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0B724ZZ	Dilation of Carina, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0B727DZ	Dilation of Carina with Intraluminal Device, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0B727ZZ	Dilation of Carina, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Dilation of Carina with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0B728DZ			
0B728ZZ	Dilation of Carina, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
	Insertion of Intraluminal Device into Tracheobronchial Tree, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0BH07DZ			
0BH17EZ	Insertion of Endotracheal Airway into Trachea, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Insertion of Endotracheal Airway into Trachea, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0BH18EZ			
0BJ14ZZ	Inspection of Trachea, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0BJ18ZZ	Inspection of Trachea, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0BQ10ZZ	Repair Trachea, Open Approach	Procedure	ICD-10-PCS
0BQ13ZZ	Repair Trachea, Percutaneous Approach	Procedure	ICD-10-PCS
0BQ14ZZ	Repair Trachea, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0BQ17ZZ	Repair Trachea, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0BQ18ZZ	Repair Trachea, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0BQ20ZZ	Repair Carina, Open Approach	Procedure	ICD-10-PCS
0BQ23ZZ	Repair Carina, Percutaneous Approach	Procedure	ICD-10-PCS
0BQ24ZZ	Repair Carina, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix C. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Outcome in this Request

Code	Description	Code Category	Code Type
0BQ27ZZ	Repair Carina, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0BQ28ZZ	Repair Carina, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0CHY7BZ	Insertion of Airway into Mouth and Throat, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Insertion of Airway into Mouth and Throat, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0CHY8BZ			
0CJS4ZZ	Inspection of Larynx, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0CJS8ZZ	Inspection of Larynx, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0DH57BZ	Insertion of Airway into Esophagus, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0DH58BZ	Insertion of Airway into Esophagus, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0DL57DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0DL58DZ			
0WHQ7YZ	Insertion of Other Device into Respiratory Tract, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
31.1	Tracheostomy	Procedure	ICD-9-CM
31.2	Tracheostomy	Procedure	ICD-9-CM
31.21	Tracheostomy	Procedure	ICD-9-CM
31.29	Tracheostomy	Procedure	ICD-9-CM
31.42	Laryngoscopy	Procedure	ICD-9-CM
31.99	Intubation	Procedure	ICD-9-CM
31231	Laryngoscopy	Procedure	CPT-4
31502	Intubation	Procedure	CPT-4
31505	Laryngoscopy	Procedure	CPT-4
31525	Laryngoscopy	Procedure	CPT-4
31526	Laryngoscopy	Procedure	CPT-4
31527	Laryngoscopy	Procedure	CPT-4
31528	Laryngoscopy	Procedure	CPT-4
31529	Laryngoscopy	Procedure	CPT-4
31560	Laryngoscopy	Procedure	CPT-4
31561	Laryngoscopy	Procedure	CPT-4
31603	Tracheostomy	Procedure	CPT-4
31605	Tracheostomy	Procedure	CPT-4
31610	Tracheostomy	Procedure	CPT-4
31612	Tracheostomy	Procedure	CPT-4
31615	Tracheostomy	Procedure	CPT-4
	Irrigation of Respiratory Tract using Irrigating Substance, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E1F78Z			
	Irrigation of Respiratory Tract using Irrigating Substance, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
3E1F88Z	Endoscopic		
5A1935Z	Respiratory Ventilation, Less than 24 Consecutive Hours	Procedure	ICD-10-PCS
5A1945Z	Respiratory Ventilation, 24-96 Consecutive Hours	Procedure	ICD-10-PCS
5A1955Z	Respiratory Ventilation, Greater than 96 Consecutive Hours	Procedure	ICD-10-PCS
91000	Intubation	Procedure	CPT-4
96	Intubation	Procedure	ICD-9-CM
96.0	Intubation	Procedure	ICD-9-CM
96.01	Intubation	Procedure	ICD-9-CM
96.02	Intubation	Procedure	ICD-9-CM
96.03	Intubation	Procedure	ICD-9-CM

Appendix C. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Outcome in this Request

Code	Description	Code	
		Category	Code Type
96.04	Intubation	Procedure	ICD-9-CM
96.05	Intubation	Procedure	ICD-9-CM
96.06	Intubation	Procedure	ICD-9-CM
96.56	Intubation	Procedure	ICD-9-CM
96.7	Intubation	Procedure	ICD-9-CM
96.70	Intubation	Procedure	ICD-9-CM
96.71	Intubation	Procedure	ICD-9-CM
96.72	Intubation	Procedure	ICD-9-CM
99220	ICU Admission	Procedure	CPT-4
99221	ICU Admission	Procedure	CPT-4
99222	ICU Admission	Procedure	CPT-4
99223	ICU Admission	Procedure	CPT-4
99224	ICU Admission	Procedure	CPT-4
99225	ICU Admission	Procedure	CPT-4
99226	ICU Admission	Procedure	CPT-4
99291	ICU Admission	Procedure	CPT-4
99292	ICU Admission	Procedure	CPT-4
A0396	Intubation	Procedure	HCPCS
V44.0	Tracheostomy	Diagnosis	ICD-9-CM
V55.0	Tracheostomy	Diagnosis	ICD-9-CM
Z43.0	Encounter for Attention to Tracheostomy	Diagnosis	ICD-10-CM
Z93.0	Tracheostomy Status	Diagnosis	ICD-10-CM
Angioedema			
995.1	Angioedema	Diagnosis	ICD-9-CM
T783XXA	Angioedema	Diagnosis	ICD-10-CM

Appendix D. Generic and Brand Names of Medical Products Used to Define Exposure Incidence and Exclusion Criteria in this Request

Generic Name	Brand Name
Angiotensin-Converting Enzyme Inhibitors (ACEI)	
AMLODIPINE BESYLATE/BENAZEPRIL HCL	Lotrel
AMLODIPINE BESYLATE/BENAZEPRIL HCL	amlodipine-benazepril
BENAZEPRIL HCL	Lotensin
BENAZEPRIL HCL	benazepril
BENAZEPRIL HCL/HYDROCHLOROTHIAZIDE	Lotensin HCT
BENAZEPRIL HCL/HYDROCHLOROTHIAZIDE	benazepril-hydrochlorothiazide
CAPTOPRIL	captopril
CAPTOPRIL/HYDROCHLOROTHIAZIDE	captopril-hydrochlorothiazide
ENALAPRIL MALEATE	Epaned
ENALAPRIL MALEATE	Vasotec
ENALAPRIL MALEATE	enalapril maleate
ENALAPRIL MALEATE/HYDROCHLOROTHIAZIDE	Vaseretic
ENALAPRIL MALEATE/HYDROCHLOROTHIAZIDE	enalapril-hydrochlorothiazide
FOSINOPRIL SODIUM	fosinopril
FOSINOPRIL SODIUM/HYDROCHLOROTHIAZIDE	fosinopril-hydrochlorothiazide
LISINOPRIL	Prinivil
LISINOPRIL	Qbrelis
LISINOPRIL	Zestril
LISINOPRIL	lisinopril
LISINOPRIL/HYDROCHLOROTHIAZIDE	Zestoretic
LISINOPRIL/HYDROCHLOROTHIAZIDE	lisinopril-hydrochlorothiazide
MOEXIPRIL HCL	Univasc
MOEXIPRIL HCL	moexipril
MOEXIPRIL HCL/HYDROCHLOROTHIAZIDE	Uniretic
MOEXIPRIL HCL/HYDROCHLOROTHIAZIDE	moexipril-hydrochlorothiazide
PERINDOPRIL ARGININE/AMLODIPINE BESYLATE	Prestalia
PERINDOPRIL ERBUMINE	Aceon
PERINDOPRIL ERBUMINE	perindopril erbumine
QUINAPRIL HCL	Accupril
QUINAPRIL HCL	quinapril
QUINAPRIL HCL/HYDROCHLOROTHIAZIDE	Accuretic
QUINAPRIL HCL/HYDROCHLOROTHIAZIDE	quinapril-hydrochlorothiazide
RAMIPRIL	Altace
RAMIPRIL	ramipril
TRANDOLAPRIL	Mavik
TRANDOLAPRIL	trandolapril
TRANDOLAPRIL/VERAPAMIL HCL	Tarka
TRANDOLAPRIL/VERAPAMIL HCL	trandolapril-verapamil
amlodipine besylate/benazepril HCl	amlodipine-benazepril
benazepril HCl	Lotensin
benazepril HCl	benazepril
captopril	captopril
enalapril maleate	enalapril maleate
lisinopril	lisinopril
lisinopril/hydrochlorothiazide	lisinopril-hydrochlorothiazide
quinapril HCl	quinapril
ramipril	ramipril
trandolapril	trandolapril

Appendix D. Generic and Brand Names of Medical Products Used to Define Exposure Incidence and Exclusion Criteria in this Request

Generic Name	Brand Name
Angiotensin II Receptor Blockers (ARB)	
AMLODIPINE BESYLATE/OLMESARTAN MEDOXOMIL	Azor
AMLODIPINE BESYLATE/OLMESARTAN MEDOXOMIL	amlodipine-olmesartan
AMLODIPINE BESYLATE/VALSARTAN	Exforge
AMLODIPINE BESYLATE/VALSARTAN	amlodipine-valsartan
AMLODIPINE BESYLATE/VALSARTAN/HYDROCHLOROTHIAZIDE	Exforge HCT
AMLODIPINE BESYLATE/VALSARTAN/HYDROCHLOROTHIAZIDE	amlodipine-valsartan-hcthiazyd
AZILSARTAN MEDOXOMIL	Edarbi
AZILSARTAN MEDOXOMIL/CHLORTHALIDONE	Edarbyclor
CANDESARTAN CILEXETIL	Atacand
CANDESARTAN CILEXETIL	candesartan
CANDESARTAN CILEXETIL/HYDROCHLOROTHIAZIDE	Atacand HCT
CANDESARTAN CILEXETIL/HYDROCHLOROTHIAZIDE	candesartan-hydrochlorothiazid
EPROSARTAN MESYLATE	Teveten
EPROSARTAN MESYLATE	eprosartan
EPROSARTAN MESYLATE/HYDROCHLOROTHIAZIDE	Teveten HCT
IRBESARTAN	Avapro
IRBESARTAN	irbesartan
IRBESARTAN/HYDROCHLOROTHIAZIDE	Avalide
IRBESARTAN/HYDROCHLOROTHIAZIDE	irbesartan-hydrochlorothiazide
LOSARTAN POTASSIUM	Cozaar
LOSARTAN POTASSIUM	losartan
LOSARTAN	Hyzaar
POTASSIUM/HYDROCHLOROTHIAZIDE	
LOSARTAN POTASSIUM/HYDROCHLOROTHIAZIDE	losartan-hydrochlorothiazide
NEBIVOLOL HCL/VALSARTAN	Byvalson
OLMESARTAN MEDOXOMIL	Benicar
OLMESARTAN MEDOXOMIL	olmesartan
OLMESARTAN MEDOXOMIL/AMLODIPINE	Tribenzor
BESYLATE/HYDROCHLOROTHIAZIDE	
OLMESARTAN MEDOXOMIL/AMLODIPINE	olmesartan-amlodipin-hcthiazyd
BESYLATE/HYDROCHLOROTHIAZIDE	
OLMESARTAN MEDOXOMIL/HYDROCHLOROTHIAZIDE	Benicar HCT
OLMESARTAN MEDOXOMIL/HYDROCHLOROTHIAZIDE	olmesartan-hydrochlorothiazide
TELMISARTAN	Micardis
TELMISARTAN	telmisartan
TELMISARTAN/AMLODIPINE BESYLATE	Twynsta
TELMISARTAN/AMLODIPINE BESYLATE	telmisartan-amlodipine
TELMISARTAN/HYDROCHLOROTHIAZIDE	Micardis HCT
TELMISARTAN/HYDROCHLOROTHIAZIDE	telmisartan-hydrochlorothiazid
VALSARTAN	Diovan
VALSARTAN	valsartan
VALSARTAN/HYDROCHLOROTHIAZIDE	Diovan HCT
VALSARTAN/HYDROCHLOROTHIAZIDE	valsartan-hydrochlorothiazide
amlodipine besylate/olmesartan medoxomil	amlodipine-olmesartan
amlodipine besylate/valsartan	amlodipine-valsartan
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiazyd
candesartan cilexetil	Atacand
candesartan cilexetil	candesartan
candesartan cilexetil/hydrochlorothiazide	Atacand HCT

Appendix D. Generic and Brand Names of Medical Products Used to Define Exposure Incidence and Exclusion Criteria in this Request

Generic Name	Brand Name
candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
irbesartan	irbesartan
irbesartan/hydrochlorothiazide	irbesartan-hydrochlorothiazide
losartan potassium	losartan
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide
olmesartan medoxomil	Benicar
olmesartan medoxomil	olmesartan
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	olmesartan-amlodipin-hcthiazid
olmesartan medoxomil/hydrochlorothiazide	Benicar HCT
telmisartan	telmisartan
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
valsartan	valsartan
valsartan/hydrochlorothiazide	valsartan-hydrochlorothiazide

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

Code	Description	Code Category	Code Type
Heart Failure			
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
428	Heart failure	Diagnosis	ICD-9-CM
428.0	Congestive heart failure, unspecified	Diagnosis	ICD-9-CM
428.1	Left heart failure	Diagnosis	ICD-9-CM
428.2	Systolic heart failure	Diagnosis	ICD-9-CM
428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
428.3	Diastolic heart failure	Diagnosis	ICD-9-CM
428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.9	Unspecified heart failure	Diagnosis	ICD-9-CM
I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
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	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I50	Heart failure	Diagnosis	ICD-10-CM
I50.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
I50.2	Systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.3	Diastolic (congestive) heart failure	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I50.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.4	Combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
I50.811	Acute right heart failure	Diagnosis	ICD-10-CM
I50.812	Chronic right heart failure	Diagnosis	ICD-10-CM
I50.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
I50.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
I50.82	Biventricular heart failure	Diagnosis	ICD-10-CM
I50.83	High output heart failure	Diagnosis	ICD-10-CM
I50.84	End stage heart failure	Diagnosis	ICD-10-CM
I50.89	Other heart failure	Diagnosis	ICD-10-CM
I50.9	Heart failure, unspecified	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
Allergies			
472.0	Chronic rhinitis	Diagnosis	ICD-9-CM
477.0	Allergic rhinitis due to pollen	Diagnosis	ICD-9-CM
477.1	Allergic rhinitis, due to food	Diagnosis	ICD-9-CM
477.2	Allergic rhinitis due to animal (cat) (dog) hair and dander	Diagnosis	ICD-9-CM
477.8	Allergic rhinitis due to other allergen	Diagnosis	ICD-9-CM
477.9	Allergic rhinitis, cause unspecified	Diagnosis	ICD-9-CM
478.8	Upper respiratory tract hypersensitivity reaction, site unspecified	Diagnosis	ICD-9-CM
558.3	Gastroenteritis and colitis, allergic	Diagnosis	ICD-9-CM
691.0	Diaper or napkin rash	Diagnosis	ICD-9-CM
691.8	Other atopic dermatitis and related conditions	Diagnosis	ICD-9-CM
692.0	Contact dermatitis and other eczema due to detergents	Diagnosis	ICD-9-CM
692.1	Contact dermatitis and other eczema due to oils and greases	Diagnosis	ICD-9-CM
692.2	Contact dermatitis and other eczema due to solvents	Diagnosis	ICD-9-CM
692.3	Contact dermatitis and other eczema due to drugs and medicines in contact with skin	Diagnosis	ICD-9-CM
692.4	Contact dermatitis and other eczema due to other chemical products	Diagnosis	ICD-9-CM
692.5	Contact dermatitis and other eczema due to food in contact with skin	Diagnosis	ICD-9-CM
692.6	Contact dermatitis and other eczema due to plants (except food)	Diagnosis	ICD-9-CM
692.70	Unspecified dermatitis due to sun	Diagnosis	ICD-9-CM
692.71	Contact dermatitis and other eczema due to sunburn	Diagnosis	ICD-9-CM
692.72	Acute dermatitis due to solar radiation	Diagnosis	ICD-9-CM
692.73	Actinic reticuloid and actinic granuloma	Diagnosis	ICD-9-CM
692.74	Other chronic dermatitis due to solar radiation	Diagnosis	ICD-9-CM
692.75	Disseminated superficial actinic porokeratosis (DSAP)	Diagnosis	ICD-9-CM
692.76	Sunburn of second degree	Diagnosis	ICD-9-CM
692.77	Sunburn of third degree	Diagnosis	ICD-9-CM
692.79	Other dermatitis due to solar radiation	Diagnosis	ICD-9-CM
692.81	Dermatitis due to cosmetics	Diagnosis	ICD-9-CM
692.82	Dermatitis due to other radiation	Diagnosis	ICD-9-CM
692.83	Dermatitis due to metals	Diagnosis	ICD-9-CM
692.84	Contact dermatitis and other eczema due to animal (cat) (dog) dander	Diagnosis	ICD-9-CM
692.89	Contact dermatitis and other eczema due to other specified agent	Diagnosis	ICD-9-CM
692.9	Contact dermatitis and other eczema, due to unspecified cause	Diagnosis	ICD-9-CM
693.0	Dermatitis due to drugs and medicines taken internally	Diagnosis	ICD-9-CM
693.1	Dermatitis due to food taken internally	Diagnosis	ICD-9-CM
693.8	Dermatitis due to other specified substances taken internally	Diagnosis	ICD-9-CM
693.9	Dermatitis due to unspecified substance taken internally	Diagnosis	ICD-9-CM
708.0	Allergic urticaria	Diagnosis	ICD-9-CM
708.1	Idiopathic urticaria	Diagnosis	ICD-9-CM
708.2	Urticaria due to cold and heat	Diagnosis	ICD-9-CM
708.3	Dermatographic urticaria	Diagnosis	ICD-9-CM
708.4	Vibratory urticaria	Diagnosis	ICD-9-CM
708.5	Cholinergic urticaria	Diagnosis	ICD-9-CM
708.8	Other specified urticaria	Diagnosis	ICD-9-CM
708.9	Unspecified urticaria	Diagnosis	ICD-9-CM
995.0	Other anaphylactic reaction	Diagnosis	ICD-9-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
995.27	Other drug allergy	Diagnosis	ICD-9-CM
995.3	Allergy, unspecified not elsewhere classified	Diagnosis	ICD-9-CM
995.7	Other adverse food reactions, not elsewhere classified	Diagnosis	ICD-9-CM
J30.0	Vasomotor rhinitis	Diagnosis	ICD-10-CM
J30.1	Allergic rhinitis due to pollen	Diagnosis	ICD-10-CM
J30.2	Other seasonal allergic rhinitis	Diagnosis	ICD-10-CM
J30.5	Allergic rhinitis due to food	Diagnosis	ICD-10-CM
J30.81	Allergic rhinitis due to animal (cat) (dog) hair and dander	Diagnosis	ICD-10-CM
J30.89	Other allergic rhinitis	Diagnosis	ICD-10-CM
J30.9	Allergic rhinitis, unspecified	Diagnosis	ICD-10-CM
J31.0	Chronic rhinitis	Diagnosis	ICD-10-CM
J39.3	Upper respiratory tract hypersensitivity reaction, site unspecified	Diagnosis	ICD-10-CM
K52.21	Food protein-induced enterocolitis syndrome	Diagnosis	ICD-10-CM
K52.22	Food protein-induced enteropathy	Diagnosis	ICD-10-CM
K52.29	Other allergic and dietetic gastroenteritis and colitis	Diagnosis	ICD-10-CM
L20.0	Besnier's prurigo	Diagnosis	ICD-10-CM
L20.81	Atopic neurodermatitis	Diagnosis	ICD-10-CM
L20.82	Flexural eczema	Diagnosis	ICD-10-CM
L20.84	Intrinsic (allergic) eczema	Diagnosis	ICD-10-CM
L20.89	Other atopic dermatitis	Diagnosis	ICD-10-CM
L20.9	Atopic dermatitis, unspecified	Diagnosis	ICD-10-CM
L22	Diaper dermatitis	Diagnosis	ICD-10-CM
L23.0	Allergic contact dermatitis due to metals	Diagnosis	ICD-10-CM
L23.1	Allergic contact dermatitis due to adhesives	Diagnosis	ICD-10-CM
L23.2	Allergic contact dermatitis due to cosmetics	Diagnosis	ICD-10-CM
L23.3	Allergic contact dermatitis due to drugs in contact with skin	Diagnosis	ICD-10-CM
L23.4	Allergic contact dermatitis due to dyes	Diagnosis	ICD-10-CM
L23.5	Allergic contact dermatitis due to other chemical products	Diagnosis	ICD-10-CM
L23.6	Allergic contact dermatitis due to food in contact with the skin	Diagnosis	ICD-10-CM
L23.7	Allergic contact dermatitis due to plants, except food	Diagnosis	ICD-10-CM
L23.81	Allergic contact dermatitis due to animal (cat) (dog) dander	Diagnosis	ICD-10-CM
L23.89	Allergic contact dermatitis due to other agents	Diagnosis	ICD-10-CM
L23.9	Allergic contact dermatitis, unspecified cause	Diagnosis	ICD-10-CM
L24.0	Irritant contact dermatitis due to detergents	Diagnosis	ICD-10-CM
L24.1	Irritant contact dermatitis due to oils and greases	Diagnosis	ICD-10-CM
L24.2	Irritant contact dermatitis due to solvents	Diagnosis	ICD-10-CM
L24.3	Irritant contact dermatitis due to cosmetics	Diagnosis	ICD-10-CM
L24.4	Irritant contact dermatitis due to drugs in contact with skin	Diagnosis	ICD-10-CM
L24.5	Irritant contact dermatitis due to other chemical products	Diagnosis	ICD-10-CM
L24.6	Irritant contact dermatitis due to food in contact with skin	Diagnosis	ICD-10-CM
L24.7	Irritant contact dermatitis due to plants, except food	Diagnosis	ICD-10-CM
L24.81	Irritant contact dermatitis due to metals	Diagnosis	ICD-10-CM
L24.89	Irritant contact dermatitis due to other agents	Diagnosis	ICD-10-CM
L24.9	Irritant contact dermatitis, unspecified cause	Diagnosis	ICD-10-CM
L25.0	Unspecified contact dermatitis due to cosmetics	Diagnosis	ICD-10-CM
L25.1	Unspecified contact dermatitis due to drugs in contact with skin	Diagnosis	ICD-10-CM
L25.2	Unspecified contact dermatitis due to dyes	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code	
		Category	Code Type
L25.3	Unspecified contact dermatitis due to other chemical products	Diagnosis	ICD-10-CM
L25.4	Unspecified contact dermatitis due to food in contact with skin	Diagnosis	ICD-10-CM
L25.5	Unspecified contact dermatitis due to plants, except food	Diagnosis	ICD-10-CM
L25.8	Unspecified contact dermatitis due to other agents	Diagnosis	ICD-10-CM
L25.9	Unspecified contact dermatitis, unspecified cause	Diagnosis	ICD-10-CM
L27.0	Generalized skin eruption due to drugs and medicaments taken internally	Diagnosis	ICD-10-CM
L27.1	Localized skin eruption due to drugs and medicaments taken internally	Diagnosis	ICD-10-CM
L27.2	Dermatitis due to ingested food	Diagnosis	ICD-10-CM
L27.8	Dermatitis due to other substances taken internally	Diagnosis	ICD-10-CM
L27.9	Dermatitis due to unspecified substance taken internally	Diagnosis	ICD-10-CM
L50.0	Allergic urticaria	Diagnosis	ICD-10-CM
L50.1	Idiopathic urticaria	Diagnosis	ICD-10-CM
L50.2	Urticaria due to cold and heat	Diagnosis	ICD-10-CM
L50.3	Dermatographic urticaria	Diagnosis	ICD-10-CM
L50.4	Vibratory urticaria	Diagnosis	ICD-10-CM
L50.5	Cholinergic urticaria	Diagnosis	ICD-10-CM
L50.6	Contact urticaria	Diagnosis	ICD-10-CM
L50.8	Other urticaria	Diagnosis	ICD-10-CM
L50.9	Urticaria, unspecified	Diagnosis	ICD-10-CM
L55.0	Sunburn of first degree	Diagnosis	ICD-10-CM
L55.1	Sunburn of second degree	Diagnosis	ICD-10-CM
L55.2	Sunburn of third degree	Diagnosis	ICD-10-CM
L55.9	Sunburn, unspecified	Diagnosis	ICD-10-CM
L56.0	Drug phototoxic response	Diagnosis	ICD-10-CM
L56.1	Drug photoallergic response	Diagnosis	ICD-10-CM
L56.2	Photocontact dermatitis [berloque dermatitis]	Diagnosis	ICD-10-CM
L56.3	Solar urticaria	Diagnosis	ICD-10-CM
L56.4	Polymorphous light eruption	Diagnosis	ICD-10-CM
L56.5	Disseminated superficial actinic porokeratosis (DSAP)	Diagnosis	ICD-10-CM
L56.8	Other specified acute skin changes due to ultraviolet radiation	Diagnosis	ICD-10-CM
L56.9	Acute skin change due to ultraviolet radiation, unspecified	Diagnosis	ICD-10-CM
L57.1	Actinic reticuloid	Diagnosis	ICD-10-CM
L57.5	Actinic granuloma	Diagnosis	ICD-10-CM
L57.8	Other skin changes due to chronic exposure to nonionizing radiation	Diagnosis	ICD-10-CM
L57.9	Skin changes due to chronic exposure to nonionizing radiation, unspecified	Diagnosis	ICD-10-CM
L58.0	Acute radiodermatitis	Diagnosis	ICD-10-CM
L58.1	Chronic radiodermatitis	Diagnosis	ICD-10-CM
L58.9	Radiodermatitis, unspecified	Diagnosis	ICD-10-CM
T50.995A	Adverse effect of other drugs, medicaments and biological substances, initial encounter	Diagnosis	ICD-10-CM
T78.0	Anaphylactic reaction due to food	Diagnosis	ICD-10-CM
T78.00	Anaphylactic reaction due to unspecified food	Diagnosis	ICD-10-CM
T78.00XA	Anaphylactic reaction due to unspecified food, initial encounter	Diagnosis	ICD-10-CM
T78.00XD	Anaphylactic reaction due to unspecified food, subsequent encounter	Diagnosis	ICD-10-CM
T78.00XS	Anaphylactic reaction due to unspecified food, sequela	Diagnosis	ICD-10-CM
T78.01	Anaphylactic reaction due to peanuts	Diagnosis	ICD-10-CM
T78.01XA	Anaphylactic reaction due to peanuts, initial encounter	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code	
		Category	Code Type
T78.01XD	Anaphylactic reaction due to peanuts, subsequent encounter	Diagnosis	ICD-10-CM
T78.01XS	Anaphylactic reaction due to peanuts, sequela	Diagnosis	ICD-10-CM
T78.02	Anaphylactic reaction due to shellfish (crustaceans)	Diagnosis	ICD-10-CM
T78.02XA	Anaphylactic reaction due to shellfish (crustaceans), initial encounter	Diagnosis	ICD-10-CM
T78.02XD	Anaphylactic reaction due to shellfish (crustaceans), subsequent encounter	Diagnosis	ICD-10-CM
T78.02XS	Anaphylactic reaction due to shellfish (crustaceans), sequela	Diagnosis	ICD-10-CM
T78.03	Anaphylactic reaction due to other fish	Diagnosis	ICD-10-CM
T78.03XA	Anaphylactic reaction due to other fish, initial encounter	Diagnosis	ICD-10-CM
T78.03XD	Anaphylactic reaction due to other fish, subsequent encounter	Diagnosis	ICD-10-CM
T78.03XS	Anaphylactic reaction due to other fish, sequela	Diagnosis	ICD-10-CM
T78.04	Anaphylactic reaction due to fruits and vegetables	Diagnosis	ICD-10-CM
T78.04XA	Anaphylactic reaction due to fruits and vegetables, initial encounter	Diagnosis	ICD-10-CM
T78.04XD	Anaphylactic reaction due to fruits and vegetables, subsequent encounter	Diagnosis	ICD-10-CM
T78.04XS	Anaphylactic reaction due to fruits and vegetables, sequela	Diagnosis	ICD-10-CM
T78.05	Anaphylactic reaction due to tree nuts and seeds	Diagnosis	ICD-10-CM
T78.05XA	Anaphylactic reaction due to tree nuts and seeds, initial encounter	Diagnosis	ICD-10-CM
T78.05XD	Anaphylactic reaction due to tree nuts and seeds, subsequent encounter	Diagnosis	ICD-10-CM
T78.05XS	Anaphylactic reaction due to tree nuts and seeds, sequela	Diagnosis	ICD-10-CM
T78.06	Anaphylactic reaction due to food additives	Diagnosis	ICD-10-CM
T78.06XA	Anaphylactic reaction due to food additives, initial encounter	Diagnosis	ICD-10-CM
T78.06XD	Anaphylactic reaction due to food additives, subsequent encounter	Diagnosis	ICD-10-CM
T78.06XS	Anaphylactic reaction due to food additives, sequela	Diagnosis	ICD-10-CM
T78.07	Anaphylactic reaction due to milk and dairy products	Diagnosis	ICD-10-CM
T78.07XA	Anaphylactic reaction due to milk and dairy products, initial encounter	Diagnosis	ICD-10-CM
T78.07XD	Anaphylactic reaction due to milk and dairy products, subsequent encounter	Diagnosis	ICD-10-CM
T78.07XS	Anaphylactic reaction due to milk and dairy products, sequela	Diagnosis	ICD-10-CM
T78.08	Anaphylactic reaction due to eggs	Diagnosis	ICD-10-CM
T78.08XA	Anaphylactic reaction due to eggs, initial encounter	Diagnosis	ICD-10-CM
T78.08XD	Anaphylactic reaction due to eggs, subsequent encounter	Diagnosis	ICD-10-CM
T78.08XS	Anaphylactic reaction due to eggs, sequela	Diagnosis	ICD-10-CM
T78.09	Anaphylactic reaction due to other food products	Diagnosis	ICD-10-CM
T78.09XA	Anaphylactic reaction due to other food products, initial encounter	Diagnosis	ICD-10-CM
T78.09XD	Anaphylactic reaction due to other food products, subsequent encounter	Diagnosis	ICD-10-CM
T78.09XS	Anaphylactic reaction due to other food products, sequela	Diagnosis	ICD-10-CM
T78.1XXA	Other adverse food reactions, not elsewhere classified, initial encounter	Diagnosis	ICD-10-CM
T78.2	Anaphylactic shock, unspecified	Diagnosis	ICD-10-CM
T78.2XXA	Anaphylactic shock, unspecified, initial encounter	Diagnosis	ICD-10-CM
T78.2XXD	Anaphylactic shock, unspecified, subsequent encounter	Diagnosis	ICD-10-CM
T78.2XXS	Anaphylactic shock, unspecified, sequela	Diagnosis	ICD-10-CM
T78.40	Allergy, unspecified	Diagnosis	ICD-10-CM
T78.40XA	Allergy, unspecified, initial encounter	Diagnosis	ICD-10-CM
T78.40XD	Allergy, unspecified, subsequent encounter	Diagnosis	ICD-10-CM
T78.40XS	Allergy, unspecified, sequela	Diagnosis	ICD-10-CM
T78.49XA	Other allergy, initial encounter	Diagnosis	ICD-10-CM
T80.5	Anaphylactic reaction due to serum	Diagnosis	ICD-10-CM
T80.51	Anaphylactic reaction due to administration of blood and blood products	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code	
		Category	Code Type
T80.51XA	Anaphylactic reaction due to administration of blood and blood products, initial encounter	Diagnosis	ICD-10-CM
T80.51XD	Anaphylactic reaction due to administration of blood and blood products, subsequent encounter	Diagnosis	ICD-10-CM
T80.51XS	Anaphylactic reaction due to administration of blood and blood products, sequela	Diagnosis	ICD-10-CM
T80.52	Anaphylactic reaction due to vaccination	Diagnosis	ICD-10-CM
T80.52XA	Anaphylactic reaction due to vaccination, initial encounter	Diagnosis	ICD-10-CM
T80.52XD	Anaphylactic reaction due to vaccination, subsequent encounter	Diagnosis	ICD-10-CM
T80.52XS	Anaphylactic reaction due to vaccination, sequela	Diagnosis	ICD-10-CM
T80.59	Anaphylactic reaction due to other serum	Diagnosis	ICD-10-CM
T80.59XA	Anaphylactic reaction due to other serum, initial encounter	Diagnosis	ICD-10-CM
T80.59XD	Anaphylactic reaction due to other serum, subsequent encounter	Diagnosis	ICD-10-CM
T80.59XS	Anaphylactic reaction due to other serum, sequela	Diagnosis	ICD-10-CM
T88.6	Anaphylactic reaction due to adverse effect of correct drug or medication properly administered	Diagnosis	ICD-10-CM
T88.6XXA	Anaphylactic reaction due to adverse effect of correct drug or medication properly administered, initial encounter	Diagnosis	ICD-10-CM
T88.6XXD	Anaphylactic reaction due to adverse effect of correct drug or medication properly administered, subsequent encounter	Diagnosis	ICD-10-CM
T88.6XXS	Anaphylactic reaction due to adverse effect of correct drug or medication properly administered, sequela	Diagnosis	ICD-10-CM
V07.1	Need for desensitization to allergens	Diagnosis	ICD-9-CM
V13.81	Personal history of anaphylaxis	Diagnosis	ICD-9-CM
V14.0	Personal history of allergy to penicillin	Diagnosis	ICD-9-CM
V14.1	Personal history of allergy to other antibiotic agent	Diagnosis	ICD-9-CM
V14.2	Personal history of allergy to sulfonamides	Diagnosis	ICD-9-CM
V14.3	Personal history of allergy to other anti-infective agent	Diagnosis	ICD-9-CM
V14.4	Personal history of allergy to anesthetic agent	Diagnosis	ICD-9-CM
V14.5	Personal history of allergy to narcotic agent	Diagnosis	ICD-9-CM
V14.6	Personal history of allergy to analgesic agent	Diagnosis	ICD-9-CM
V14.7	Personal history of allergy to serum or vaccine	Diagnosis	ICD-9-CM
V14.8	Personal history of allergy to other specified medicinal agents	Diagnosis	ICD-9-CM
V14.9	Personal history of allergy to unspecified medicinal agent	Diagnosis	ICD-9-CM
V15.09	Personal history of other allergy, other than to medicinal agents	Diagnosis	ICD-9-CM
V72.7	Diagnostic skin and sensitization tests	Diagnosis	ICD-9-CM
Z01.82	Encounter for allergy testing	Diagnosis	ICD-10-CM
Z01.89	Encounter for other specified special examinations	Diagnosis	ICD-10-CM
Z51.6	Encounter for desensitization to allergens	Diagnosis	ICD-10-CM
Z87.892	Personal history of anaphylaxis	Diagnosis	ICD-10-CM
Z88.0	Allergy status to penicillin	Diagnosis	ICD-10-CM
Z88.1	Allergy status to other antibiotic agents status	Diagnosis	ICD-10-CM
Z88.2	Allergy status to sulfonamides status	Diagnosis	ICD-10-CM
Z88.3	Allergy status to other anti-infective agents status	Diagnosis	ICD-10-CM
Z88.4	Allergy status to anesthetic agent status	Diagnosis	ICD-10-CM
Z88.5	Allergy status to narcotic agent status	Diagnosis	ICD-10-CM
Z88.6	Allergy status to analgesic agent status	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
Z88.7	Allergy status to serum and vaccine status	Diagnosis	ICD-10-CM
Z88.8	Allergy status to other drugs, medicaments and biological substances status	Diagnosis	ICD-10-CM
Z88.9	Allergy status to unspecified drugs, medicaments and biological substances status	Diagnosis	ICD-10-CM
Z91.0	Allergy status, other than to drugs and biological substances	Diagnosis	ICD-10-CM
Z91.01	Food allergy status	Diagnosis	ICD-10-CM
Z91.010	Allergy to peanuts	Diagnosis	ICD-10-CM
Z91.011	Allergy to milk products	Diagnosis	ICD-10-CM
Z91.012	Allergy to eggs	Diagnosis	ICD-10-CM
Z91.013	Allergy to seafood	Diagnosis	ICD-10-CM
Z91.018	Allergy to other foods	Diagnosis	ICD-10-CM
Z91.02	Food additives allergy status	Diagnosis	ICD-10-CM
Z91.03	Insect allergy status	Diagnosis	ICD-10-CM
Z91.030	Bee allergy status	Diagnosis	ICD-10-CM
Z91.038	Other insect allergy status	Diagnosis	ICD-10-CM
Z91.04	Nonmedicinal substance allergy status	Diagnosis	ICD-10-CM
Z91.040	Latex allergy status	Diagnosis	ICD-10-CM
Z91.041	Radiographic dye allergy status	Diagnosis	ICD-10-CM
Z91.048	Other nonmedicinal substance allergy status	Diagnosis	ICD-10-CM
Z91.09	Other allergy status, other than to drugs and biological substances	Diagnosis	ICD-10-CM
Angioedema			
995.1	Angioedema	Diagnosis	ICD-9-CM
T783XXA	Angioedema	Diagnosis	ICD-10-CM
T783XXD	Angioneurotic edema, sequela	Diagnosis	ICD-10-CM
T783XXS	Angioneurotic edema, subsequent encounter	Diagnosis	ICD-10-CM
Diabetes			
250	Diabetes mellitus	Diagnosis	ICD-9-CM
250.0	Diabetes mellitus without mention of complication	Diagnosis	ICD-9-CM
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.02	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.1	Diabetes with ketoacidosis	Diagnosis	ICD-9-CM
250.10	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.12	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.2	Diabetes with hyperosmolarity	Diagnosis	ICD-9-CM
250.20	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.22	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.3	Diabetes with other coma	Diagnosis	ICD-9-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code	
		Category	Code Type
250.30	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.32	Diabetes with other coma, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.4	Diabetes with renal manifestations	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.5	Diabetes with ophthalmic manifestations	Diagnosis	ICD-9-CM
250.50	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.52	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.6	Diabetes with neurological manifestations	Diagnosis	ICD-9-CM
250.60	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.62	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.7	Diabetes with peripheral circulatory disorders	Diagnosis	ICD-9-CM
250.70	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.72	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.8	Diabetes with other specified manifestations	Diagnosis	ICD-9-CM
250.80	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.82	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.9	Diabetes with unspecified complication	Diagnosis	ICD-9-CM
250.90	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.92	Diabetes with unspecified complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
A5500	For diabetics only, fitting (including follow-up), custom preparation and supply of off-the-shelf depth-inlay shoe manufactured to accommodate multidensity insert(s), per shoe	Procedure	HCPCS
A5501	For diabetics only, fitting (including follow-up), custom preparation and supply of shoe molded from cast(s) of patient's foot (custom molded shoe), per shoe	Procedure	HCPCS
A5503	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with roller or rigid rocker bottom, per shoe	Procedure	HCPCS
A5504	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with wedge(s), per shoe	Procedure	HCPCS
A5505	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with metatarsal bar, per shoe	Procedure	HCPCS
A5506	For diabetics only, modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe with off-set heel(s), per shoe	Procedure	HCPCS
A5507	For diabetics only, not otherwise specified modification (including fitting) of off-the-shelf depth-inlay shoe or custom molded shoe, per shoe	Procedure	HCPCS
A5508	For diabetics only, deluxe feature of off-the-shelf depth-inlay shoe or custom molded shoe, per shoe	Procedure	HCPCS
A5510	For diabetics only, direct formed, compression molded to patient's foot without external heat source, multiple-density insert(s) prefabricated, per shoe	Procedure	HCPCS
A5512	For diabetics only, multiple density insert, direct formed, molded to foot after external heat source of 230 degrees Fahrenheit or higher, total contact with patient's foot, including arch, base layer minimum of 1/4 inch material of shore a 35 durome	Procedure	HCPCS
A5513	For diabetics only, multiple density insert, custom molded from model of patient's foot, total contact with patient's foot, including arch, base layer minimum of 3/16 inch material of shore a 35 durometer or higher), includes arch filler and other sh	Procedure	HCPCS
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3521	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3522	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3523	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E10.3529	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3531	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3532	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3533	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E10.3542	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E10.3543	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E10.3549	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E10.3551	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E10.3552	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E10.3559	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.622	Type 1 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E10.628	Type 1 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.9	Type 1 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3391	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3491	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3511	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3512	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhexmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhexmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhexmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhexmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E13.10	Other specified diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E13.11	Other specified diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3291	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3292	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3293	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3299	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3311	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3391	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3392	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E13.3393	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3399	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3411	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3413	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3419	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3491	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3492	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3493	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3499	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3511	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3512	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3513	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3519	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3521	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E13.3522	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3523	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3529	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3531	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code Category	Code Type
E13.3532	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3533	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3539	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3541	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E13.3542	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E13.3543	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E13.3549	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E13.3551	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E13.3552	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E13.3553	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E13.3559	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3591	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3592	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3593	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3599	Other specified diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E13.37X1	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E13.37X2	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E13.37X3	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E13.37X9	Other specified diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM

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Code	Description	Code	
		Category	Code Type
E13.39	Other specified diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E13.40	Other specified diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E13.41	Other specified diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E13.42	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E13.43	Other specified diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E13.44	Other specified diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E13.49	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E13.52	Other specified diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E13.59	Other specified diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E13.610	Other specified diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E13.618	Other specified diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E13.620	Other specified diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E13.621	Other specified diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E13.622	Other specified diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E13.628	Other specified diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E13.630	Other specified diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E13.638	Other specified diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E13.641	Other specified diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E13.649	Other specified diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.65	Other specified diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E13.69	Other specified diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E13.8	Other specified diabetes mellitus without complications	Diagnosis	ICD-10-CM
E13.9	Diabetes outpatient self-management training services, individual, per 30 minutes	Procedure	HCPCS
G0108	Diabetes outpatient self-management training services, group session (2 or more), per 30 minutes	Procedure	HCPCS
G0109	Initial physician evaluation and management of a diabetic patient with diabetic sensory neuropathy resulting in a loss of protective sensation (LOPS) which must include: (1) the diagnosis of LOPS, (2) a patient history, (3) a physical examination that	Procedure	HCPCS
G0245	Follow-up physician evaluation and management of a diabetic patient with diabetic sensory neuropathy resulting in a loss of protective sensation (LOPS) to include at least the following: (1) a patient history, (2) a physical examination that includes	Procedure	HCPCS
G0246	Routine foot care by a physician of a diabetic patient with diabetic sensory neuropathy resulting in a loss of protective sensation (LOPS) to include the local care of superficial wounds (i.e., superficial to muscle and fascia) and at least the follow	Procedure	HCPCS
G0247	Diabetic patient with most recent hemoglobin A1c level (within the last 6 months) documented as greater than 9%	Procedure	HCPCS

Appendix F. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Covariates in this Request

Code	Description	Code	
		Category	Code Type
G8015	Diabetic patient with most recent hemoglobin A1c level (within the last 6 months) documented as less than or equal to 9%	Procedure	HCPCS
G8016	Clinician documented that diabetic patient was not eligible candidate for hemoglobin A1c measure	Procedure	HCPCS
G8017	Clinician has not provided care for the diabetic patient for the required time for hemoglobin A1c measure (6 months)	Procedure	HCPCS
G8018	Diabetic patient with most recent low-density lipoprotein (within the last 12 months) documented as greater than or equal to 100 mg/dl	Procedure	HCPCS
G8019	Diabetic patient with most recent low-density lipoprotein (within the last 12 months) documented as less than 100 mg/dl	Procedure	HCPCS
G8020	Clinician documented that diabetic patient was not eligible candidate for low-density lipoprotein measure	Procedure	HCPCS
G8021	Clinician has not provided care for the diabetic patient for the required time for low-density lipoprotein measure (12 months)	Procedure	HCPCS
G8022	Diabetic patient with most recent blood pressure (within the last 6 months) documented as equal to or greater than 140 systolic or equal to or greater than 80 mm Hg diastolic	Procedure	HCPCS
G8023	Diabetic patient with most recent blood pressure (within the last 6 months) documented as less than 140 systolic and less than 80 diastolic	Procedure	HCPCS
G8024	Clinician documented that the diabetic patient was not eligible candidate for blood pressure measure	Procedure	HCPCS
G8025	Clinician has not provided care for the diabetic patient for the required time for blood pressure measure (within the last 6 months)	Procedure	HCPCS
G8026	Clinician has not provided care for the diabetic retinopathy patient for the required time for macular edema and retinopathy measurement	Procedure	HCPCS
G8332	Patient documented to have had findings of macular or fundus exam communicated to the physician managing the diabetes care	Procedure	HCPCS
G8333	Documentation of findings of macular or fundus exam not communicated to the physician managing the patient's ongoing diabetes care	Procedure	HCPCS
G8334	Clinician documentation that patient was not an eligible candidate for the findings of their macular or fundus exam being communicated to the physician managing their diabetes care during the reporting year	Procedure	HCPCS
G8335	Clinician has not provided care for the diabetic retinopathy patient for the required time for physician communication measurement	Procedure	HCPCS
G8336	Diabetic patients with no documentation of hemoglobin A1c level (within the last 12 months)	Procedure	HCPCS

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Code	Description	Code	
		Category	Code Type
G8385	Diabetic patients with no documentation of low-density lipoprotein (within the last 12 months)	Procedure	HCPCS
G8386	Diabetic patients with no documentation of blood pressure measurement (within the last 12 months)	Procedure	HCPCS
Ischemic Heart Disease			
411	Other acute and subacute forms of ischemic heart disease	Diagnosis	ICD-9-CM
411.0	Postmyocardial infarction syndrome	Diagnosis	ICD-9-CM
411.1	Intermediate coronary syndrome	Diagnosis	ICD-9-CM
411.8	Other acute and subacute forms of ischemic heart disease	Diagnosis	ICD-9-CM
411.81	Acute coronary occlusion without myocardial infarction	Diagnosis	ICD-9-CM
411.89	Other acute and subacute form of ischemic heart disease	Diagnosis	ICD-9-CM
413	Angina pectoris	Diagnosis	ICD-9-CM
413.0	Angina decubitus	Diagnosis	ICD-9-CM
413.1	Prinzmetal angina	Diagnosis	ICD-9-CM
413.9	Other and unspecified angina pectoris	Diagnosis	ICD-9-CM
414	Other forms of chronic ischemic heart disease	Diagnosis	ICD-9-CM
414.0	Coronary atherosclerosis	Diagnosis	ICD-9-CM
414.00	Coronary atherosclerosis of unspecified type of vessel, native or graft	Diagnosis	ICD-9-CM
414.01	Coronary atherosclerosis of native coronary artery	Diagnosis	ICD-9-CM
414.02	Coronary atherosclerosis of autologous vein bypass graft	Diagnosis	ICD-9-CM
414.03	Coronary atherosclerosis of nonautologous biological bypass graft	Diagnosis	ICD-9-CM
414.04	Coronary atherosclerosis of artery bypass graft	Diagnosis	ICD-9-CM
414.05	Coronary atherosclerosis of unspecified type of bypass graft	Diagnosis	ICD-9-CM
414.06	Coronary atherosclerosis, of native coronary artery of transplanted heart	Diagnosis	ICD-9-CM
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart	Diagnosis	ICD-9-CM
414.1	Aneurysm and dissection of heart	Diagnosis	ICD-9-CM
414.10	Aneurysm of heart	Diagnosis	ICD-9-CM
414.11	Aneurysm of coronary vessels	Diagnosis	ICD-9-CM
414.12	Dissection of coronary artery	Diagnosis	ICD-9-CM
414.19	Other aneurysm of heart	Diagnosis	ICD-9-CM
414.2	Chronic total occlusion of coronary artery	Diagnosis	ICD-9-CM
414.3	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-9-CM
414.4	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-9-CM
414.8	Other specified forms of chronic ischemic heart disease	Diagnosis	ICD-9-CM
414.9	Unspecified chronic ischemic heart disease	Diagnosis	ICD-9-CM
429.2	Unspecified cardiovascular disease	Diagnosis	ICD-9-CM
429.5	Rupture of chordae tendineae	Diagnosis	ICD-9-CM
429.6	Rupture of papillary muscle	Diagnosis	ICD-9-CM
429.7	Certain sequelae of myocardial infarction, not elsewhere classified	Diagnosis	ICD-9-CM
429.71	Acquired cardiac septal defect	Diagnosis	ICD-9-CM
429.79	Other certain sequelae of myocardial infarction, not elsewhere classified	Diagnosis	ICD-9-CM
429.9	Unspecified heart disease	Diagnosis	ICD-9-CM
G8033	Prior myocardial infarction, coronary artery disease patient documented to be on beta-blocker therapy	Procedure	HCPCS
G8034	Prior myocardial infarction, coronary artery disease patient not documented to be on beta-blocker therapy	Procedure	HCPCS

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Code	Description	Code Category	Code Type
G8035	Clinician documented that prior myocardial infarction, coronary artery disease patient was not eligible candidate for beta-blocker therapy measure	Procedure	HCPCS
G8036	Coronary artery disease patient documented to be on antiplatelet therapy	Procedure	HCPCS
G8037	Coronary artery disease patient not documented to be on antiplatelet therapy	Procedure	HCPCS
G8038	Clinician documented that coronary artery disease patient was not eligible candidate for antiplatelet therapy measure	Procedure	HCPCS
G8039	Coronary artery disease patient with low-density lipoprotein documented to be greater than 100 mg/dl	Procedure	HCPCS
G8040	Coronary artery disease patient with low-density lipoprotein documented to be less than or equal to 100 mg/dl	Procedure	HCPCS
G8041	Clinician documented that coronary artery disease patient was not eligible candidate for low-density lipoprotein measure	Procedure	HCPCS
I20.0	Unstable angina	Diagnosis	ICD-10-CM
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I20.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
I23.0	Hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.1	Atrial septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.2	Ventricular septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.4	Rupture of chordae tendineae as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.5	Rupture of papillary muscle as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.7	Postinfarction angina	Diagnosis	ICD-10-CM
I23.8	Other current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I24.0	Acute coronary thrombosis not resulting in myocardial infarction	Diagnosis	ICD-10-CM
I24.1	Dressler's syndrome	Diagnosis	ICD-10-CM
I24.8	Other forms of acute ischemic heart disease	Diagnosis	ICD-10-CM
I24.9	Acute ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	Diagnosis	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.3	Aneurysm of heart	Diagnosis	ICD-10-CM

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Code	Description	Code	
		Category	Code Type
I25.41	Coronary artery aneurysm	Diagnosis	ICD-10-CM
I25.42	Coronary artery dissection	Diagnosis	ICD-10-CM
I25.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
I25.6	Silent myocardial ischemia	Diagnosis	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM

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Code	Description	Code	
		Category	Code Type
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris	Diagnosis	ICD-10-CM
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.82	Chronic total occlusion of coronary artery	Diagnosis	ICD-10-CM
I25.83	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-10-CM
I25.84	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-10-CM
I25.89	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
I25.9	Chronic ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I51.0	Cardiac septal defect, acquired	Diagnosis	ICD-10-CM
I51.1	Rupture of chordae tendineae, not elsewhere classified	Diagnosis	ICD-10-CM
I51.2	Rupture of papillary muscle, not elsewhere classified	Diagnosis	ICD-10-CM
I51.9	Heart disease, unspecified	Diagnosis	ICD-10-CM
I52	Other heart disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
Renal Disorders			
584	Acute kidney failure	Diagnosis	ICD-9-CM
584.5	Acute kidney failure with lesion of tubular necrosis	Diagnosis	ICD-9-CM
584.6	Acute kidney failure with lesion of renal cortical necrosis	Diagnosis	ICD-9-CM
584.7	Acute kidney failure with lesion of medullary [papillary] necrosis	Diagnosis	ICD-9-CM
584.8	Acute kidney failure with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
584.9	Acute kidney failure, unspecified	Diagnosis	ICD-9-CM
585	Chronic kidney disease (CKD)	Diagnosis	ICD-9-CM
585.1	Chronic kidney disease, Stage I	Diagnosis	ICD-9-CM
585.2	Chronic kidney disease, Stage II (mild)	Diagnosis	ICD-9-CM
585.3	Chronic kidney disease, Stage III (moderate)	Diagnosis	ICD-9-CM
585.4	Chronic kidney disease, Stage IV (severe)	Diagnosis	ICD-9-CM
585.5	Chronic kidney disease, Stage V	Diagnosis	ICD-9-CM
585.6	End stage renal disease	Diagnosis	ICD-9-CM
585.9	Chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
586	Unspecified renal failure	Diagnosis	ICD-9-CM
587	Unspecified renal sclerosis	Diagnosis	ICD-9-CM
N17.0	Acute kidney failure with tubular necrosis	Diagnosis	ICD-10-CM

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Code	Description	Code	
		Category	Code Type
N17.1	Acute kidney failure with acute cortical necrosis	Diagnosis	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	Diagnosis	ICD-10-CM
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N19	Unspecified kidney failure	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM

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

Generic Name	Brand Name
Allergy Treatments	
Chlorpheniramine Maleate/Codeine	Cotabflu
Phosphate/Acetaminophen	
DIPHENHYDRAMINE HCL	Dicopanol
acetaminophen/dextromethorphan HBr	Child Cough and Sore Throat
acridinium bromide	Tudorza Pressair
albuterol sulfate	ProAir HFA
albuterol sulfate	ProAir RespiClick
albuterol sulfate	Proventil HFA
albuterol sulfate	Ventolin HFA
albuterol sulfate	Vospire ER
albuterol sulfate	albuterol sulfate
alcaftadine	Lastacast
aldosterone	aldosterone (bulk)
aminophylline	aminophylline
aminophylline	aminophylline (bulk)
arformoterol tartrate	Brovana
azelastine HCl	Astelin
azelastine HCl	Astepro
azelastine HCl	Optivar
azelastine HCl	azelastine
azelastine HCl/fluticasone propionate	Dymista
azelastine/fluticasone/sodium chloride/sodium	Ticalast
bicarbonate	
beclomethasone dipropionate	Beconase AQ
beclomethasone dipropionate	QNASL
beclomethasone dipropionate	Qvar
beclomethasone dipropionate	Qvar RediHaler
benralizumab	Fasenra
bepotastine besilate	Bepreve
betamethasone acetate and sodium phos in sterile water/PF	betameth ac,sodphos(PF)-water
betamethasone acetate and sodium	Betalan SUIK
phosph/norflurane/HFC 245fa	
betamethasone acetate and sodium	Pod-Care 100CG
phosph/norflurane/HFC 245fa	
betamethasone acetate/betamethasone sodium phosphate	Beta-1
betamethasone acetate/betamethasone sodium phosphate	Celestone Soluspan
betamethasone acetate/betamethasone sodium phosphate	Pod-Care 100C
betamethasone acetate/betamethasone sodium phosphate	ReadySharp Betamethasone
betamethasone acetate/betamethasone sodium phosphate	betamethasone acet,sod phos
betamethasone acetate/betamethasone sodium phosphate	betamethasone ace,sodphos-wtr
phosphate/water	
betamethasone sodium phosph in sterile water for injection	betamethasone sodphosph-water
brompheniramine maleate	J-TAN PD

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

Generic Name	Brand Name
brompheniramine maleate	brompheniramine maleate(bulk)
brompheniramine maleate/phenylephrine HCl	Children's Cold-Allergy (PE)
brompheniramine maleate/phenylephrine HCl	Dimaphen (PE)
brompheniramine maleate/phenylephrine HCl	Glenmax PEB
brompheniramine maleate/phenylephrine HCl	Relhist BP
brompheniramine maleate/phenylephrine HCl/chlophedianol HCl	Trexibrom
brompheniramine maleate/phenylephrine HCl/codeine phosphate	M-END PE
brompheniramine maleate/phenylephrine HCl/codeine phosphate	Poly-Tussin AC
brompheniramine maleate/phenylephrine HCl/dextromethorphan	AP-Hist DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Ala-Hist DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Altipres-B
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Bio T Pres-B
brompheniramine maleate/phenylephrine HCl/dextromethorphan	BroveX PEB DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Children's Cold and Cough(PE)
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Children's Cold and CoughDM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Children's Dibromm DM Cold-Cou
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Cold and Cough DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Cold and Cough Elixir
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Dimaphen DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Dimetapp DM Cold-Cough(PE)
brompheniramine maleate/phenylephrine HCl/dextromethorphan	EndaCof - DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Glenmax PEB DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Glenmax PEB DM Forte
brompheniramine maleate/phenylephrine HCl/dextromethorphan	LoHist PEB DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	LoHist-DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	M-Hist DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Niva-Hist DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Presgen B

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

Generic Name	Brand Name
brompheniramine maleate/phenylephrine HCl/dextromethorphan	RelCof DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Rynex DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Tussi Pres-B
brompheniramine maleate/phenylephrine HCl/dextromethorphan	Wal-tap DM
brompheniramine maleate/phenylephrine HCl/dextromethorphan	brompheniramin-phenylephrin-DM
brompheniramine maleate/pseudoephedrine HCl/chlophedianol	Atuss DA
brompheniramine maleate/pseudoephedrine HCl/dextromethorphan	brompheniramine-pseudoeph-DM
budesonide	Pulmicort
budesonide	Pulmicort Flexhaler
budesonide	Rhinocort Allergy
budesonide	Rhinocort Aqua
budesonide	budesonide
budesonide, micronized	budesonide, micronized (bulk)
budesonide/formoterol fumarate	Symbicort
carbinoxamine maleate	Arbinoxa
carbinoxamine maleate	Karbinal ER
carbinoxamine maleate	PALGIC
carbinoxamine maleate	RyVent
carbinoxamine maleate	carbinoxamine maleate
cetirizine HCl	24Hour Allergy
cetirizine HCl	All Day Allergy (cetirizine)
cetirizine HCl	All Day Allergy Relief(cetir)
cetirizine HCl	Aller-Tec
cetirizine HCl	Allergy Relief (cetirizine)
cetirizine HCl	Child Allergy Relf(cetirizine)
cetirizine HCl	Child's All Day Allergy(cetir)
cetirizine HCl	Children's Aller-Tec
cetirizine HCl	Children's Allergy Complete
cetirizine HCl	Children's Allergy(cetirizine)
cetirizine HCl	Children's Cetirizine
cetirizine HCl	Children's Wal-Zyr
cetirizine HCl	Children's Zyrtec Allergy
cetirizine HCl	Wal-Zyr (cetirizine)
cetirizine HCl	Zyrtec
cetirizine HCl	cetirizine
cetirizine HCl/pseudoephedrine HCl	All Day Allergy-D
cetirizine HCl/pseudoephedrine HCl	Aller-Tec D
cetirizine HCl/pseudoephedrine HCl	Allergy Complete-D
cetirizine HCl/pseudoephedrine HCl	Allergy D-12
cetirizine HCl/pseudoephedrine HCl	Allergy Relief-D (cetirizine)
cetirizine HCl/pseudoephedrine HCl	Allergy-Congest Relief-D (cet)
cetirizine HCl/pseudoephedrine HCl	Cetiri-D
cetirizine HCl/pseudoephedrine HCl	Wal-Zyr D
cetirizine HCl/pseudoephedrine HCl	Zyrtec-D

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

Generic Name	Brand Name
cetirizine HCl/pseudoephedrine HCl	cetirizine-pseudoephedrine
chlophedianol HCl/guaifenesin	Chlo Tuss EX
chlophedianol HCl/guaifenesin	Vanacof G
chlophedianol HCl/guaifenesin	chlophedianol-guaifenesin
chlorcyclizine HCl	Ahist (chlorcyclizine)
chlorcyclizine HCl/codeine phosphate	Poly-Tussin
chlorcyclizine HCl/phenylephrine HCl	Dallergy (chlorcyclizine-PE)
chlorcyclizine HCl/pseudoephedrine HCl	Nasopen
chlorcyclizine HCl/pseudoephedrine HCl	Stahist AD
chlorcyclizine HCl/pseudoephedrine HCl	Biclora-D
chlorcyclizine HCl/pseudoephedrine HCl/codeine phosphate	Poly-Tussin D
chlorcyclizine hydrochloride/chlophedianol hydrochloride	Biclora
chlorpheniram/phenyleph/dextromethorphan/acetaminophen/guaifn	Cold-Flu M-SymptomDay-Night
chlorpheniram/phenyleph/dextromethorphan/acetaminophen/guaifn	Tylenol Cold-Flu SevereDay-Nt
chlorpheniramine maleate	Aller-Chlor
chlorpheniramine maleate	Allergy (chlorpheniramine)
chlorpheniramine maleate	Allergy 4-Hour
chlorpheniramine maleate	Allergy Relief(chlorpheniramn)
chlorpheniramine maleate	Allergy-Time
chlorpheniramine maleate	Chlor-Trimeton
chlorpheniramine maleate	Chlorphen SR
chlorpheniramine maleate	ED Chlorped Jr
chlorpheniramine maleate	Ed-ChlorPed
chlorpheniramine maleate	Ed-Chlortan
chlorpheniramine maleate	Pharbechlor
chlorpheniramine maleate	Wal-Finate
chlorpheniramine maleate	chlorpheniramine maleate
chlorpheniramine maleate/codeine phosphate	Codar AR
chlorpheniramine maleate/codeine phosphate	EndaCof-C
chlorpheniramine maleate/codeine phosphate	Tuxarin ER
chlorpheniramine maleate/codeine phosphate	Z-Tuss AC
chlorpheniramine maleate/codeine phosphate	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/dextromethorphan HBr	Chld Robitussin Night CoughDM
chlorpheniramine maleate/dextromethorphan HBr	Cough and Cold(chlorphen-DM)
chlorpheniramine maleate/dextromethorphan HBr	Cough-Cold Relief HBP
chlorpheniramine maleate/dextromethorphan HBr	Maxi-TussDM(chlorpheniramine)
chlorpheniramine maleate/dextromethorphan HBr	Scot-Tussin DM
chlorpheniramine maleate/phenylephrine HCl	Cold and Allergy
chlorpheniramine maleate/phenylephrine HCl	Sinus and Allergy PE
chlorpheniramine maleate/phenylephrine HCl	Sinus-Allergy (phenylephrine)

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

Generic Name	Brand Name
chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl	Carbaphen CH
chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl	Carbaphen Ped CH
chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl	ExaPhen CH
chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl	Phenagil CH
chlorpheniramine maleate/phenylephrine HCl/codeine phosphate	CapCof
chlorpheniramine maleate/phenylephrine HCl/codeine phosphate	Maxi-Tuss CD
chlorpheniramine maleate/phenylephrine HCl/dextromethorphan	Bio-Rytuss
chlorpheniramine maleate/phenylephrine HCl/dextromethorphan	Maxichlor PEH DM
chlorpheniramine maleate/phenylephrine HCl/ibuprofen	Advil Allergy-Congestion Rlf
chlorpheniramine maleate/phenylephrine bitartrate/aspirin	Cold Relief
chlorpheniramine maleate/phenylephrine bitartrate/aspirin	Cold Relief Plus
chlorpheniramine maleate/pseudoephedrine HCl/codeine	Tricode AR
chlorpheniramine maleate/pseudoephedrine HCl/codeine	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/ibuprofen	Advil Allergy Sinus
ciclesonide	Alvesco
ciclesonide	Omnaris
ciclesonide	Zetonna
clemastine fumarate	Allergy Relief (clemastine)
clemastine fumarate	Allerhist (clemastine)
clemastine fumarate	Allerhist-1
clemastine fumarate	Dayhist Allergy
clemastine fumarate	Tavist-1
clemastine fumarate	clemastine
clemizole HCl	clemizole HCl (bulk)
codeine phosphate/guaifenesin	G Tussin AC

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

Generic Name	Brand Name
codeine phosphate/guaifenesin	Robafen AC
codeine phosphate/guaifenesin	Virtussin AC
codeine phosphate/guaifenesin	codeine-guaifenesin
codeine phosphate/pyrilamine maleate	Pro-Clear AC
codeine polistirex/chlorpheniramine polistirex	Tuzistra XR
cortisone acetate	cortisone
cromolyn sodium	Nasal Allergy SymptomControl
cromolyn sodium	cromolyn
cyproheptadine HCl	cyproheptadine
cyproheptadine HCl	cyproheptadine (bulk)
deflazacort	Emflaza
desloratadine	Clarinet
desloratadine	desloratadine
desloratadine/pseudoephedrine sulfate	Clarinet-D 12 HOUR
desloratadine/pseudoephedrine sulfate	Clarinet-D 24 HOUR
desoxycorticosterone acetate	desoxycorticosterone ac(bulk)
dexamethasone	Decadron
dexamethasone	DexPak 10 day
dexamethasone	DexPak 13 Day
dexamethasone	DexPak 6 Day
dexamethasone	Dexamethasone IntenSol
dexamethasone	Dxevo
dexamethasone	HiDex
dexamethasone	LoCort
dexamethasone	TaperDex
dexamethasone	ZoDex
dexamethasone	ZonaCort
dexamethasone	dexamethasone
dexamethasone acetate and sodium phosphate in sterile water	dexamethasone ac, sodph-water
dexamethasone acetate in sodium chloride, iso-osmotic	dexamethasoneace-NaCl,iso-osm
dexamethasone acetate, micronized	dexamethasone ac, micro(bulk)
dexamethasone sodium phosphate	Dexonto
dexamethasone sodium phosphate	dexamethasone sod phos(bulk)
dexamethasone sodium phosphate in 0.9 % sodium chloride	dexamethasone-0.9 % sod.chlor
dexamethasone sodium phosphate/PF	Active Injection Kit D (PF)
dexamethasone sodium phosphate/PF	DoubleDex (PF)
dexamethasone sodium phosphate/PF	MAS Care-Pak (PF)
dexamethasone sodium phosphate/PF	dexamethasone sodium phos(PF)
dexamethasone sodium phosphate/lidocaine HCl	Lidocidex-I
dexamethasone, micronized	dexamethasone,micronized(bulk)
dexamethasone/PF/norflurane/pentafluoropropane (HFC 245fa)	DMT SUIK
dexbromphen-pseudoephedrine	M-End DMX
-dextromethorphan	
dexbrompheniramine maleate	Ala-Hist IR
dexbrompheniramine maleate	Pediavent
dexbrompheniramine maleate/chlophedianol HCl	Chlo Hist
dexbrompheniramine maleate/phenylephrine HCl	Ala-Hist PE

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

Generic Name	Brand Name
dexbrompheniramine maleate/phenylephrine HCl	Dallergy(dexbrompheniramn-PE)
dexbrompheniramine maleate/phenylephrine HCl	dexbrompheniramine-phenyleph
dexbrompheniramine maleate/pseudoephedrine HCl	Acticon (dexbromph-pse)
dexbrompheniramine maleate/pseudoephedrine HCl/codeine phos	M-End Max D
dexchlorpheniramine maleate	Ryclora
dexchlorpheniramine maleate	dexchlorpheniramine maleate
dexchlorpheniramine maleate/phenylephrine HCl	Rymed(dexchlorpheniramine-PE)
dexchlorpheniramine maleate/phenylephrine HCl	Stahist (dexchlorpheniramine)
dexchlorpheniramine maleate/phenylephrine HCl/codeine	Pro-Red AC (w/dexchlorphenir)
dexchlorpheniramine maleate/phenylephrine/dextromethorphan	Polytussin DM
dextromethorphan	Child Plus Cough andRunnyNose
HBr/acetaminophen/chlorpheniramine maleate dextromethorphan	Child's TylenolplusCough,RNos
HBr/acetaminophen/chlorpheniramine maleate dextromethorphan	Coricidin HBP Flu
HBr/acetaminophen/chlorpheniramine maleate dextromethorphan	Flu BP
HBr/acetaminophen/chlorpheniramine maleate dextromethorphan	Flu HBP
HBr/acetaminophen/chlorpheniramine maleate dextromethorphan	Maximum Strength Flu
HBr/acetaminophen/chlorpheniramine maleate dextromethorphan	Vicks NyQuil Cold/Flu (cpm)
HBr/acetaminophen/chlorpheniramine maleate dextromethorphan	Diabetic Tussin Night Time
HBr/acetaminophen/diphenhydramine HCl dextromethorphan	All-Nite Cold-Flu
HBr/acetaminophen/doxylamine dextromethorphan	Cold-Flu Relief
HBr/acetaminophen/doxylamine dextromethorphan	Contac Cold-Flu Night
HBr/acetaminophen/doxylamine dextromethorphan	Coricidin HBP Cold-MultiSympt
HBr/acetaminophen/doxylamine dextromethorphan	Cough-Sore Throat Night
HBr/acetaminophen/doxylamine dextromethorphan	Night Time
HBr/acetaminophen/doxylamine dextromethorphan	Night Time Cold
HBr/acetaminophen/doxylamine dextromethorphan	Night Time Cold and FluRelief
HBr/acetaminophen/doxylamine dextromethorphan	Night Time Cold-Flu
HBr/acetaminophen/doxylamine dextromethorphan	Night Time Cold-Flu Relief

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

Generic Name	Brand Name
dextromethorphan	Nighttime Cold-Flu
HBr/acetaminophen/doxylamine dextromethorphan	Nighttime Cold-Flu Relief
HBr/acetaminophen/doxylamine dextromethorphan	Nite Time Cold-Flu
HBr/acetaminophen/doxylamine dextromethorphan	Nite Time Cold-Flu Relief
HBr/acetaminophen/doxylamine dextromethorphan	Nite-Time Cold-Flu
HBr/acetaminophen/doxylamine dextromethorphan	Nitetime Multi-Symptom
HBr/acetaminophen/doxylamine dextromethorphan	Robitussin Cold-Flu Night
HBr/acetaminophen/doxylamine dextromethorphan	Vicks Nature Fusion Cold-Flu
HBr/acetaminophen/doxylamine dextromethorphan	Vicks NyQuil Cold/FluLiquicap
HBr/acetaminophen/doxylamine dextromethorphan	Vicks Nyquil Nighttime Relief
HBr/acetaminophen/doxylamine dextromethorphan HBr/doxylamine succinate	Daytime-Nighttime Cough
dextromethorphan HBr/doxylamine succinate	NightTime Cough
dextromethorphan HBr/doxylamine succinate	Nite Time Cough
dextromethorphan HBr/doxylamine succinate	Nitetime Cough
dextromethorphan HBr/doxylamine succinate	Robitussin Nighttime CoughDM
dextromethorphan HBr/doxylamine succinate	SafeTussin PM
dextromethorphan HBr/doxylamine succinate	Tussin Nighttime Cough DM
dextromethorphan HBr/doxylamine succinate	Vicks NyQuil Cough
dextromethorphan HBr/phenylephrine HCl	Children's Cold-CoughDaytime
dextromethorphan HBr/phenylephrine HCl	Children's Sudafed PE Cough
dextromethorphan HBr/phenylephrine HCl	Cold and Cough (pe-dm)
dextromethorphan HBr/phenylephrine HCl	Triaminic Cold and Cough(PE)
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Cold Head CongestionDaytime
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Cold Multi-Symptom
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Cold-Flu Relief
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Day Multi-Symp Flu-SevereCold
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Day Time PE
dextromethorphan HBr/phenylephrine HCl/acetaminophen	DayTime
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Daytime Cold
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Daytime Cold-Flu
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Daytime Cold-Flu Relief (PE)

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

Generic Name	Brand Name
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Flu Relief Therapy Daytime
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Flu-Severe Cold-CoughDaytime
dextromethorphan HBr/phenylephrine HCl/acetaminophen	HerbioMed Body Aches-SinusM-S
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Mapap Cold Formula
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Mucinex Fast-MaxCongest-Head
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Mucinex Fast-MaxSevCold-Sinus
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Robitussin Cold-Flu Day
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Sudafed PEPressure-Pain-Cough
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Theraflu ExpressMax ColdDay
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Theraflu Multi-Symptom Cold
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Tylenol Cold Max Day
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Tylenol Cold Multi-SymptomDay
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Vicks DayQuil Cold-Flu Relief
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Vicks Nature Fusion
dextromethorphan HBr/phenylephrine HCl/acetaminophen	Wal-Flu Severe Cold-Cough
dextromethorphan HBr/phenylephrine HCl/dexbrompheniramine	Alahist CF
dextromethorphan HBr/phenylephrine HCl/dexbrompheniramine	Alahist DM
dextromethorphan HBr/phenylephrine HCl/dexbrompheniramine	Bionatuss DXP
dextromethorphan HBr/phenylephrine HCl/dexbrompheniramine	G-P-Tuss DXP
dextromethorphan HBr/phenylephrine HCl/dexbrompheniramine	Supress A
dextromethorphan HBr/phenylephrine/acetaminophen/doxylamine	Alka-Seltzer PlusSin-Allg-Cgh
dextromethorphan HBr/phenylephrine/acetaminophen/doxylamine	Cold Multi-SymptomNightTime
dextromethorphan HBr/phenylephrine/acetaminophen/doxylamine	Cold and Flu Relief Plus (D/N)
dextromethorphan HBr/phenylephrine/acetaminophen/doxylamine	Cold-Flu Relief, Day/Night
dextromethorphan HBr/phenylephrine/acetaminophen/doxylamine	Daytime-Nighttime

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

Generic Name	Brand Name
dextromethorphan	Daytime-Nighttime Cold-Flu
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan	Mucinex Fast-Max Nite (doxyl)
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan	Nite Time Cold-Flu Relief (PE)
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan	Severe Cold and FluNighttime
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan	Severe Sinus CongestAlrgy-Cgh
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan	Tylenol Cold Max Night
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan	Tylenol Cold Multi-SymptNight
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan	Vicks NyQuil Severe Cold-Flu
HBr/phenylephrine/acetaminophen/doxylamine dextromethorphan HBr/pseudoephedrine	DAY-TIME
HCl/acetaminophen dextromethorphan HBr/pseudoephedrine	Daytime Cold and Flu Relief
HCl/acetaminophen dextromethorphan/phenylephrine/acetaminophen /diphenhydramine	HerbioMed Deep Cold-FluNight
dextromethorphan/phenylephrine/acetaminophen /diphenhydramine	Multi-Symptom SevereCold-Nt
dextromethorphan/pseudoephrine	Alka-Seltzer Plus Cold+Flu
HCl/acetaminophen/doxylamine dextromethorphan/pseudoephrine	Night Time Cold Medicine
HCl/acetaminophen/doxylamine dextromethorphan/pseudoephrine	Night Time Cold-Flu
HCl/acetaminophen/doxylamine dextromethorphan/pseudoephrine	Night Time Cold-Flu Relief
HCl/acetaminophen/doxylamine dextromethorphan/pseudoephrine	Nite Time
HCl/acetaminophen/doxylamine diclofenac sodium	diclofenac sodium
diphenhydramine HCl	Alka-Seltzer Plus Allergy
diphenhydramine HCl	Aller-G-Time
diphenhydramine HCl	Allergy
diphenhydramine HCl	Allergy (diphenhydramine)
diphenhydramine HCl	Allergy Medication
diphenhydramine HCl	Allergy Medicine
diphenhydramine HCl	AllergyRelief(diphenhydramin)
diphenhydramine HCl	Banophen
diphenhydramine HCl	Banophen Allergy
diphenhydramine HCl	Benadryl
diphenhydramine HCl	Benadryl Allergy
diphenhydramine HCl	Child Allergy Relief (diphen)
diphenhydramine HCl	Children's Allergy (diphenhyd)
diphenhydramine HCl	Children's Allergy Medicine
diphenhydramine HCl	Children's Benadryl Allergy
diphenhydramine HCl	Children's Diphenhydramine

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

Generic Name	Brand Name
diphenhydramine HCl	Children's Wal-Dryl Allergy
diphenhydramine HCl	Complete Allergy
diphenhydramine HCl	Complete Allergy Medicine
diphenhydramine HCl	Compoz
diphenhydramine HCl	Diphedryl
diphenhydramine HCl	Diphen
diphenhydramine HCl	Diphenhist
diphenhydramine HCl	EZ Nite Sleep
diphenhydramine HCl	Geri-Dryl
diphenhydramine HCl	Medi-Phedryl
diphenhydramine HCl	Naramin
diphenhydramine HCl	NightTime Sleep Aid (diphen)
diphenhydramine HCl	Nighttime Allergy Relief
diphenhydramine HCl	Ormir
diphenhydramine HCl	Pharbedryl
diphenhydramine HCl	Q-Dryl
diphenhydramine HCl	Quenalin
diphenhydramine HCl	Rest Simply Nighttime Sleep
diphenhydramine HCl	Restfully Sleep
diphenhydramine HCl	Siladryl SA
diphenhydramine HCl	Silphen Cough
diphenhydramine HCl	Simply Sleep
diphenhydramine HCl	Sleep
diphenhydramine HCl	Sleep Aid (diphenhydramine)
diphenhydramine HCl	Sleep Aid Max Str(diphenhydr)
diphenhydramine HCl	Sleep II
diphenhydramine HCl	Sleep Time
diphenhydramine HCl	Sleep-Tabs
diphenhydramine HCl	Sleeping
diphenhydramine HCl	Total Allergy Medicine
diphenhydramine HCl	Unisom SleepGels
diphenhydramine HCl	Unisom SleepMelts
diphenhydramine HCl	Valu-Dryl Allergy
diphenhydramine HCl	Vanamine PD
diphenhydramine HCl	Vicks QlearQuil Nighttime Rlf
diphenhydramine HCl	Wal-Dryl Allergy
diphenhydramine HCl	Wal-Sleep Z
diphenhydramine HCl	Wal-Som (diphenhydramine)
diphenhydramine HCl	Z-Sleep
diphenhydramine HCl	ZzzQuil
diphenhydramine HCl	diphenhydramine HCl
diphenhydramine HCl in 0.9 % sodium chloride	diphenhydramine-0.9 %sod.chlr
diphenhydramine HCl/hydrocortisone	HC Derma-Pax
diphenhydramine HCl/phenylephrine	Adult Robitussin Night M-SCld
HCl/acetaminophen	
diphenhydramine HCl/phenylephrine	Allergy M-S Nighttime
HCl/acetaminophen	
diphenhydramine HCl/phenylephrine	Allergy Plus Severe Sinus HA
HCl/acetaminophen	
diphenhydramine HCl/phenylephrine	Allergy Sinus Headache (PE)
HCl/acetaminophen	

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

Generic Name	Brand Name
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Allergy and Cold PE
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Child Delsym Cough+Cold
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Children Dimetapp M-SCold-Flu
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Children's Mucinex NightTime
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Cold and FluRelief(diphen-pe)
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Cough and Severe Cold
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Delsym Cough-ColdNightTime
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Flu Relief Therapy Nighttime
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Flu and Sore Throat Relief
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Flu-Severe Cold-Cough Night
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Herbiomed Allergy Cold-Sinus
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Mucinex Fast-Max NiteCold-Flu
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Mucinex Sinus-Max NiteCongest
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Severe Allergy-SinusHeadache
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Severe Cold Cough-Flu
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Severe Cold PE
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Theraflu ExpressMax ColdNight
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Theraflu Night SevereCold-Cgh
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Theraflu Nighttime PowerPod
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Wal-Dryl Severe Allergy-Sinus
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Wal-Flu Severe Cold andCough
diphenhydramine HCl/phenylephrine HCl/acetaminophen	Wal-phed PE Severe Cold
diphenhydramine HCl/phenylephrine HCl/dextromethorphan HBr	Child Cold-Cough Day-Night
diphenhydramine HCl/phenylephrine/acetaminophen/guaifenesin	Sinus Relief Max StrDay-Night
diphenhydramine/phenylephrin/dextromethorphan /acetaminophen/GG	Children's M-S ColdDay-Night

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

Generic Name	Brand Name
diphenhydramine/phenylephrin/dextromethorphan/acetaminophen/GG	Daytime-ColdNighttime-Cld-Flu
diphenhydramine/phenylephrin/dextromethorphan/acetaminophen/GG	Mucinex Fast-Max Day-NiteCold
diphenhydramine/phenylephrin/dextromethorphan/acetaminophen/GG	Mucinex Fast-Max Day-NiteCong
doxylamine succ/pseudoephedrine HCl/dextromethorphan Hbr	Glentuss
doxylamine succ/pseudoephedrine HCl/dextromethorphan Hbr	Lortuss DM
doxylamine succinate/phenylephrine HCl	Poly Hist Forte
doxylamine succinate/phenylephrine HCl	Poly Hist Forte (doxylamine)
doxylamine succinate/phenylephrine HCl	doxylamine-phenylephrine
doxylamine succinate/pseudoephedrine HCl	Lortuss LQ
doxylamine/phenylephrine/dextromethorphan/acetaminophen/GG	Day-Nite Severe Cold-Flu
doxylamine/phenylephrine/dextromethorphan/acetaminophen/GG	Mucinex Fast-MaxDay-Nt(doxyl)
doxylamine/phenylephrine/dextromethorphan/acetaminophen/GG	Mucinex Sinus-Max Dy-Nt(dxyl)
doxylamine/phenylephrine/dextromethorphan/acetaminophen/GG	Severe Cold andFlu(Day/Night)
dupilumab	Dupilent
dyphylline	Lufyllin
dyphylline	dyphylline (bulk)
emedastine difumarate	Emadine
ephedrine sulfate	ephedrine sulfate
ephedrine sulfate/guaifenesin	Bronkaid Dual Action
epinastine HCl	Elestat
epinastine HCl	epinastine
epinephrine	Adrenaclick
epinephrine	Adrenalin
epinephrine	Adyphren
epinephrine	Adyphren Amp
epinephrine	Adyphren Amp II
epinephrine	Adyphren II
epinephrine	Auvi-Q
epinephrine	Bronchial Mist
epinephrine	Bronchial Mist Refill
epinephrine	EPIsnap
epinephrine	EpiPen
epinephrine	EpiPen 2-Pak
epinephrine	EpiPen Jr
epinephrine	EpiPen Jr 2-Pak
epinephrine	EpinephrineSnap-EMS
epinephrine	EpinephrineSnap-V
epinephrine	Epy
epinephrine	Primatene Mist
epinephrine	Symjepi
epinephrine	epinephrine
epinephrine HCl/PF	epinephrine HCl (PF)

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

Generic Name	Brand Name
fexofenadine HCl	Allegra Allergy
fexofenadine HCl	Aller-Fex
fexofenadine HCl	Aller-ease
fexofenadine HCl	Allergy Relief (fexofenadine)
fexofenadine HCl	Children's Allegra Allergy
fexofenadine HCl	Children's Allergy Relief(fex)
fexofenadine HCl	Children's Wal-Fex
fexofenadine HCl	Mucinex Allergy
fexofenadine HCl	Wal-Fex Allergy
fexofenadine HCl	fexofenadine
fexofenadine HCl	fexofenadine (bulk)
fexofenadine HCl/pseudoephedrine HCl	Allegra-D 12 Hour
fexofenadine HCl/pseudoephedrine HCl	Allegra-D 24 Hour
fexofenadine HCl/pseudoephedrine HCl	Allergy Relief D
fexofenadine HCl/pseudoephedrine HCl	Allergy Relief-D(fexofenadine)
fexofenadine HCl/pseudoephedrine HCl	Allergy-CongestRelief-D(fexo)
fexofenadine HCl/pseudoephedrine HCl	Wal-Fex D 12 Hour
fexofenadine HCl/pseudoephedrine HCl	Wal-Fex D 24 Hour
fexofenadine HCl/pseudoephedrine HCl	fexofenadine-pseudoephedrine
fludrocortisone acetate	fludrocortisone
flunisolide	Aerospan
flunisolide	flunisolide
fluocinolone acetonide/emollient combination no.65	Synalar Cream Kit
fluocinolone acetonide/emollient combination no.65	Synalar Ointment Kit
fluocinolone acetonide/skin cleanser comb no.28	Synalar TS
fluocinolone acetonide/skin cleanser no.10/silicone, tape	Xilapak
fluocinolone acetonide/urea/silicone, adhesive	Noxipak
flurbiprofen	flurbiprofen
fluticasone furoate	Arnuity Ellipta
fluticasone furoate	Children's Flonase Sensimist
fluticasone furoate	Flonase Sensimist
fluticasone furoate	Veramyst
fluticasone furoate/umeclidinium bromide/vilanterol trifenate	Trelegy Ellipta
fluticasone furoate/vilanterol trifenate	Breo Ellipta
fluticasone propionate	24 Hour Allergy Relief
fluticasone propionate	Aller-Flo
fluticasone propionate	Allergy Relief (fluticasone)
fluticasone propionate	ArmonAir RespiClick
fluticasone propionate	Children's Flonase Allergy Rlf
fluticasone propionate	Childrens 24 Hr Allergy Relief
fluticasone propionate	ClariSpray
fluticasone propionate	Flonase
fluticasone propionate	Flonase Allergy Relief
fluticasone propionate	Flovent Diskus
fluticasone propionate	Flovent HFA
fluticasone propionate	Xhance
fluticasone propionate	fluticasone propionate

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

Generic Name	Brand Name
fluticasone propionate	fluticasone propionate (bulk)
fluticasone propionate, micronized	fluticasone prop, micro (bulk)
fluticasone propionate/emollient combination no.65	Beser Kit
fluticasone propionate/salmeterol xinafoate	Advair Diskus
fluticasone propionate/salmeterol xinafoate	Advair HFA
fluticasone propionate/salmeterol xinafoate	AirDuo RespiClick
fluticasone propionate/salmeterol xinafoate	Wixela Inhub
fluticasone propionate/salmeterol xinafoate	fluticasone propion-salmeterol
fluticasone propionate/sodium chloride/sodium bicarbonate	Ticanase
fluticasone propionate/sodium chloride/sodium bicarbonate	Ticaspray
formoterol fumarate	Foradil Aerolizer
formoterol fumarate	Perforomist
formoterol fumarate	formoterol fumarate (bulk)
formoterol fumarate dihydrate, micronized	formoterol fum dihyd,mic(bulk)
glycopyrrolate	Seebri Neohaler
glycopyrrolate/formoterol fumarate	Bevespi Aerosphere
glycopyrrolate/nebulizer accessories	Lonhala Magnair Refill
glycopyrrolate/nebulizer and accessories	Lonhala Magnair Starter
guaifenesin/acetaminophen	Chest Congestion
guaifenesin/dextromethorphan HBr	Adt Robitussin Peak Cld DMMax
guaifenesin/dextromethorphan HBr	Adult Cough Formula DM Max
guaifenesin/dextromethorphan HBr	Adult Robitussin Peak ColdDM
guaifenesin/dextromethorphan HBr	Adult Tussin Cough CongestDM
guaifenesin/dextromethorphan HBr	Adult Tussin DM
guaifenesin/dextromethorphan HBr	Adult Wal-Tussin DM Max
guaifenesin/dextromethorphan HBr	Allfen DM
guaifenesin/dextromethorphan HBr	Biocotron
guaifenesin/dextromethorphan HBr	Biospec DMX
guaifenesin/dextromethorphan HBr	Chest Congestion Relief DM
guaifenesin/dextromethorphan HBr	Chest Congestion-CoughRelief
guaifenesin/dextromethorphan HBr	Child ChestCongestion-Cough
guaifenesin/dextromethorphan HBr	Child Cough-Chest CongestDM
guaifenesin/dextromethorphan HBr	Child Delsym Cough+ChestDM
guaifenesin/dextromethorphan HBr	Child Mucinex CoughMini-Melts
guaifenesin/dextromethorphan HBr	Child Mucus Relief Cough
guaifenesin/dextromethorphan HBr	Child TriaminicCough-Congest
guaifenesin/dextromethorphan HBr	Children's Cough
guaifenesin/dextromethorphan HBr	Children's Mucinex Cough
guaifenesin/dextromethorphan HBr	Chld Robitussin Cough-ChestDM
guaifenesin/dextromethorphan HBr	Coricidin HBP ChestCong-Cough
guaifenesin/dextromethorphan HBr	Cough Control DM
guaifenesin/dextromethorphan HBr	Cough Control DM Max
guaifenesin/dextromethorphan HBr	CoughSuppressant-Expectorant
guaifenesin/dextromethorphan HBr	Cough Syrup DM
guaifenesin/dextromethorphan HBr	Cough-Chest Congestion DM
guaifenesin/dextromethorphan HBr	DM Max
guaifenesin/dextromethorphan HBr	Daytime Mucus Relief DM
guaifenesin/dextromethorphan HBr	Delsym Cough-ChestCongest DM

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

Generic Name	Brand Name
guaifenesin/dextromethorphan HBr	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	Double-Tussin DM
guaifenesin/dextromethorphan HBr	Expectorant DM
guaifenesin/dextromethorphan HBr	Fenesin DM IR
guaifenesin/dextromethorphan HBr	G-Fenesin DM
guaifenesin/dextromethorphan HBr	G-Tron
guaifenesin/dextromethorphan HBr	G-Zyncof
guaifenesin/dextromethorphan HBr	Geri-Tussin DM
guaifenesin/dextromethorphan HBr	Guaiasorb DM
guaifenesin/dextromethorphan HBr	Guaicon DMS
guaifenesin/dextromethorphan HBr	Guaifenesin-DM
guaifenesin/dextromethorphan HBr	Intense Cough
guaifenesin/dextromethorphan HBr	Intense Cough Reliever
guaifenesin/dextromethorphan HBr	Iphen DM-NR
guaifenesin/dextromethorphan HBr	Medi-Tussin DM
guaifenesin/dextromethorphan HBr	Medi-Tussin DM Diabetic
guaifenesin/dextromethorphan HBr	Mucinex DM
guaifenesin/dextromethorphan HBr	Mucinex Fast-Max DM Max
guaifenesin/dextromethorphan HBr	Mucosa DM
guaifenesin/dextromethorphan HBr	Mucus DM
guaifenesin/dextromethorphan HBr	Mucus DM Max ER
guaifenesin/dextromethorphan HBr	Mucus Relief Cough
guaifenesin/dextromethorphan HBr	Mucus Relief DM
guaifenesin/dextromethorphan HBr	Mucus Relief DM Cough
guaifenesin/dextromethorphan HBr	Mucus Relief DM Max
guaifenesin/dextromethorphan HBr	Mucus Relief ER DM-MAX
guaifenesin/dextromethorphan HBr	Mucus and Cough Relief
guaifenesin/dextromethorphan HBr	Neo-Tuss
guaifenesin/dextromethorphan HBr	Q-Tussin DM
guaifenesin/dextromethorphan HBr	Refenesen DM
guaifenesin/dextromethorphan HBr	Ri-Tussin DM
guaifenesin/dextromethorphan HBr	Robafen DM
guaifenesin/dextromethorphan HBr	Robafen DM Cough
guaifenesin/dextromethorphan HBr	Robafen DM Cough-ChestCongest
guaifenesin/dextromethorphan HBr	Robitussin Cough-ChestCong DM
guaifenesin/dextromethorphan HBr	Safe Tussin DM
guaifenesin/dextromethorphan HBr	Scot-Tussin Senior
guaifenesin/dextromethorphan HBr	Siltussin DM DAS
guaifenesin/dextromethorphan HBr	Siltussin-DM
guaifenesin/dextromethorphan HBr	Sorbugen NR
guaifenesin/dextromethorphan HBr	Supress DM
guaifenesin/dextromethorphan HBr	TRISPEC DMX
guaifenesin/dextromethorphan HBr	Tab Tussin DM
guaifenesin/dextromethorphan HBr	Tusnel Diabetic
guaifenesin/dextromethorphan HBr	Tussin Cough DM
guaifenesin/dextromethorphan HBr	Tussin Cough-ChestCongestion
guaifenesin/dextromethorphan HBr	Tussin DM
guaifenesin/dextromethorphan HBr	Tussin DM Clear

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

Generic Name	Brand Name
guaifenesin/dextromethorphan HBr	Tussin DM Cough
guaifenesin/dextromethorphan HBr	Tussin DM Cough and Chest
guaifenesin/dextromethorphan HBr	Tussin DM Max
guaifenesin/dextromethorphan HBr	Ultra DM Free and Clear
guaifenesin/dextromethorphan HBr	Ultra Tuss Safe
guaifenesin/dextromethorphan HBr	Wal-Tussin DM
guaifenesin/dextromethorphan HBr	Zyncof
guaifenesin/dextromethorphan HBr	dextromethorphan-guaifenesin
guaifenesin/dextromethorphan HBr/phenylephrine	Actidom DMX
guaifenesin/dextromethorphan HBr/phenylephrine	Adult Robitussin M-S Cold
guaifenesin/dextromethorphan HBr/phenylephrine	Adult Robitussin Peak ColdM-S
guaifenesin/dextromethorphan HBr/phenylephrine	Adult Tussin Multi-Symp Cold
guaifenesin/dextromethorphan HBr/phenylephrine	Altipres
guaifenesin/dextromethorphan HBr/phenylephrine	Altipres Pediatric
guaifenesin/dextromethorphan HBr/phenylephrine	Aquanaz
guaifenesin/dextromethorphan HBr/phenylephrine	Bio T Pres
guaifenesin/dextromethorphan HBr/phenylephrine	Bio T Pres Pediatric
guaifenesin/dextromethorphan HBr/phenylephrine	Bio-S-Pres Dx
guaifenesin/dextromethorphan HBr/phenylephrine	BioGtuss NF
guaifenesin/dextromethorphan HBr/phenylephrine	Biobron DX
guaifenesin/dextromethorphan HBr/phenylephrine	Biobron SF
guaifenesin/dextromethorphan HBr/phenylephrine	Biocotron-D
guaifenesin/dextromethorphan HBr/phenylephrine	Biodesp DM
guaifenesin/dextromethorphan HBr/phenylephrine	Biogil
guaifenesin/dextromethorphan HBr/phenylephrine	Broncotron PED
guaifenesin/dextromethorphan HBr/phenylephrine	Brontuss SF
guaifenesin/dextromethorphan HBr/phenylephrine	Child MucinexCongestion-Cough
guaifenesin/dextromethorphan HBr/phenylephrine	Child Multi-SymptomCold/Cough
guaifenesin/dextromethorphan HBr/phenylephrine	Child's Mucus Relief M-S Cold
guaifenesin/dextromethorphan HBr/phenylephrine	Children's MucinexMulti-Symp
guaifenesin/dextromethorphan HBr/phenylephrine	Cough Control CF (PE)
guaifenesin/dextromethorphan HBr/phenylephrine	Cough and Cold
guaifenesin/dextromethorphan HBr/phenylephrine	Cough and Cold Mucus ReliefCF
guaifenesin/dextromethorphan HBr/phenylephrine	Deconex DMX
guaifenesin/dextromethorphan HBr/phenylephrine	Desgen
guaifenesin/dextromethorphan HBr/phenylephrine	Desgen DM
guaifenesin/dextromethorphan HBr/phenylephrine	Despec DM-G
guaifenesin/dextromethorphan HBr/phenylephrine	Despec EDA Cough-ColdDrops
guaifenesin/dextromethorphan HBr/phenylephrine	Despec-DM(phenyleph-DM-guaif)
guaifenesin/dextromethorphan HBr/phenylephrine	Dometuss-DMX
guaifenesin/dextromethorphan HBr/phenylephrine	Duravent DM
guaifenesin/dextromethorphan HBr/phenylephrine	Endacon
guaifenesin/dextromethorphan HBr/phenylephrine	Exactuss
guaifenesin/dextromethorphan HBr/phenylephrine	Exactuss TR
guaifenesin/dextromethorphan HBr/phenylephrine	Fast Mucus RlfCongest-Cough
guaifenesin/dextromethorphan HBr/phenylephrine	G-Supress DX
guaifenesin/dextromethorphan HBr/phenylephrine	G-Tron PED
guaifenesin/dextromethorphan HBr/phenylephrine	G-Tusicof
guaifenesin/dextromethorphan HBr/phenylephrine	Giltuss
guaifenesin/dextromethorphan HBr/phenylephrine	Giltuss Cough-Cold
guaifenesin/dextromethorphan HBr/phenylephrine	Giltuss Pediatric

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

Generic Name	Brand Name
guaifenesin/dextromethorphan HBr/phenylephrine	Giltuss TR
guaifenesin/dextromethorphan HBr/phenylephrine	Maxiphen DM
guaifenesin/dextromethorphan HBr/phenylephrine	Mucinex Fast-MaxCongest-Cough
guaifenesin/dextromethorphan HBr/phenylephrine	Mucus ReliefCongestion-Cough
guaifenesin/dextromethorphan HBr/phenylephrine	NeoTuss-D (ImprovedFormula)
guaifenesin/dextromethorphan HBr/phenylephrine	Nivanex DMX
guaifenesin/dextromethorphan HBr/phenylephrine	Pres Gen
guaifenesin/dextromethorphan HBr/phenylephrine	Pres Gen Pediatric
guaifenesin/dextromethorphan HBr/phenylephrine	Relhist DMX
guaifenesin/dextromethorphan HBr/phenylephrine	Robafen CF (phenylephrine)
guaifenesin/dextromethorphan HBr/phenylephrine	Robitussin Cough and ColdCF
guaifenesin/dextromethorphan HBr/phenylephrine	Robitussin M-S Cold CF Max
guaifenesin/dextromethorphan HBr/phenylephrine	Severe Congestion andCoughMax
guaifenesin/dextromethorphan HBr/phenylephrine	Supress DX
guaifenesin/dextromethorphan HBr/phenylephrine	Tusicof
guaifenesin/dextromethorphan HBr/phenylephrine	Tusnel DM
guaifenesin/dextromethorphan HBr/phenylephrine	Tusnel DMPediatric(phenyleph)
guaifenesin/dextromethorphan HBr/phenylephrine	Tussi-Pres
guaifenesin/dextromethorphan HBr/phenylephrine	Tussi-Pres Pediatric
guaifenesin/dextromethorphan HBr/phenylephrine	Tussin CF (PE-DM-guaif)
guaifenesin/dextromethorphan HBr/phenylephrine	Tussin CF Cough-Cold
guaifenesin/dextromethorphan HBr/phenylephrine	Tussin CF MAX
guaifenesin/dextromethorphan HBr/phenylephrine	Tusslin
guaifenesin/dextromethorphan HBr/phenylephrine	VanaTab DM
guaifenesin/dextromethorphan HBr/phenylephrine	Vanacof DM
guaifenesin/dextromethorphan HBr/phenylephrine	Wal-Tussin Cough and ColdCF
guaifenesin/dextromethorphan HBr/phenylephrine	phenylephrine-DM-guaifenesin
guaifenesin/dextromethorphan HBr/potassium citrate	Sorbutuss
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Actinel
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Actinel Pediatric
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Ambi 40PSE-400GFN-20DM
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Bionel
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Bionel Pediatric
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Capmist DM
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Desgen DM(pseudoephedrine)
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Despec-DM(pseudoeph-DM-guaif)
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Entex PAC
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Entre-Cough
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	ExeFen DMX

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

Generic Name	Brand Name
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Pecgen PSE
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Poly-Vent DM
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Robafen CF
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	TRISPEC PSE
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Tusnel DMPediatric(pseudoeph)
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Tusnel New Formula
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Tusnel Pediatric
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Tussin CF
guaifenesin/dextromethorphan HBr/pseudoephedrine HCl	Z-Cof 12 DM
guaifenesin/dyphylline	Difil-G 400
guaifenesin/ephedrine HCl	Primatene Asthma
guaifenesin/hydrocodone bitartrate	Flowtuss
guaifenesin/hydrocodone bitartrate	Obredon
guaifenesin/hydrocodone bitartrate	hydrocodone-guaifenesin
guaifenesin/phenylephrine HCl	Chest Congestion Relief PE
guaifenesin/phenylephrine HCl	Chest-Sinus CongestionRelief
guaifenesin/phenylephrine HCl	Child Mucinex StuffyNose-Chst
guaifenesin/phenylephrine HCl	Child Mucinex StuffyNose-Cold
guaifenesin/phenylephrine HCl	Children's Stuffy Nose-Cold
guaifenesin/phenylephrine HCl	Congest-Eze PE
guaifenesin/phenylephrine HCl	Deconex IR
guaifenesin/phenylephrine HCl	Despec
guaifenesin/phenylephrine HCl	Duravent PE
guaifenesin/phenylephrine HCl	ED Bron GP
guaifenesin/phenylephrine HCl	Entex LQ
guaifenesin/phenylephrine HCl	ExaPhex TR
guaifenesin/phenylephrine HCl	Fenesin PE IR
guaifenesin/phenylephrine HCl	Gilphex TR
guaifenesin/phenylephrine HCl	J-MAX
guaifenesin/phenylephrine HCl	Liquibid D-R
guaifenesin/phenylephrine HCl	Liquibid PD-R
guaifenesin/phenylephrine HCl	Maxiphen
guaifenesin/phenylephrine HCl	MucaphEd
guaifenesin/phenylephrine HCl	Mucus Relief D(phenylephrine)
guaifenesin/phenylephrine HCl	Mucus Relief PE
guaifenesin/phenylephrine HCl	Mucus Relief Sinus
guaifenesin/phenylephrine HCl	Refenesen PE
guaifenesin/phenylephrine HCl	RelCof IR
guaifenesin/phenylephrine HCl	Rescon-GG
guaifenesin/phenylephrine HCl	Supress-PE
guaifenesin/phenylephrine HCl	TL-DMX
guaifenesin/phenylephrine HCl/acetaminophen	Cold HeadCongest(gg-pe-acetm)

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

Generic Name	Brand Name
guaifenesin/phenylephrine HCl/acetaminophen	Mucinex Cold and Sinus
guaifenesin/phenylephrine HCl/acetaminophen	Mucinex Fast-Max Cold-Sinus
guaifenesin/phenylephrine HCl/acetaminophen	Mucinex Sinus-MaxPressur-Pain
guaifenesin/phenylephrine HCl/acetaminophen	Mucinex Sinus-Max SevCongestn
guaifenesin/phenylephrine HCl/acetaminophen	Mucus Relief Cold and Sinus
guaifenesin/phenylephrine HCl/acetaminophen	Mucus ReliefSinusPressur-Pain
guaifenesin/phenylephrine HCl/acetaminophen	Mucus Rlf Severe SinusCongest
guaifenesin/phenylephrine HCl/acetaminophen	Pressure-Pain PE Plus Mucus
guaifenesin/phenylephrine HCl/acetaminophen	Severe Congestion Relief
guaifenesin/phenylephrine HCl/acetaminophen	Severe Sinus
guaifenesin/phenylephrine HCl/acetaminophen	Sinus Congestion-Pain(guaif)
guaifenesin/phenylephrine HCl/acetaminophen	Sinus Relief Pressure andPain
guaifenesin/phenylephrine HCl/acetaminophen	Sinus Relief SevereCongestion
guaifenesin/phenylephrine HCl/acetaminophen	Sudafed PEPressure-Pain-Mucus
guaifenesin/phenylephrine HCl/acetaminophen	Tylenol Cold Head CongestSevr
guaifenesin/phenylephrine HCl/acetaminophen	Tylenol Sinus CongestionPain
guaifenesin/phenylephrine HCl/acetaminophen	Tylenol Sinus Severe
guaifenesin/pseudoephedrine HCl	Ambi 60PSE-400GFN
guaifenesin/pseudoephedrine HCl	Chest Congestion Relief D
guaifenesin/pseudoephedrine HCl	Congest-Eze
guaifenesin/pseudoephedrine HCl	Congestac
guaifenesin/pseudoephedrine HCl	Despec-Tab
guaifenesin/pseudoephedrine HCl	Entex T
guaifenesin/pseudoephedrine HCl	ExeFen-IR
guaifenesin/pseudoephedrine HCl	Maxifed
guaifenesin/pseudoephedrine HCl	Mucinex D
guaifenesin/pseudoephedrine HCl	Mucinex D Maximum Strength
guaifenesin/pseudoephedrine HCl	Mucus D
guaifenesin/pseudoephedrine HCl	Mucus Relief D(pseudoephed)
guaifenesin/pseudoephedrine HCl	Poly-Vent IR
guaifenesin/pseudoephedrine HCl	Respaire-30
guaifenesin/pseudoephedrine HCl	Triacting Expectorant
guaifenesin/pseudoephedrine HCl	Tusnel Pediatric
guaifenesin/pseudoephedrine HCl	pseudoephedrine-guaifenesin
halobetasol propionate/ammonium lactate	Halonate
halobetasol propionate/ammonium lactate	Halonate Pac
halobetasol propionate/ammonium lactate	Ultravate PAC
halobetasol propionate/lactic acid	Ultravate X
hydrocodone bitartrate/chlorpheniramine maleate	Vituz
hydrocodone bitartrate/homatropine	Hydrocodone Compound
methylbromide	
hydrocodone bitartrate/homatropine	Hydromet
methylbromide	
hydrocodone bitartrate/homatropine	Tussigon
methylbromide	
hydrocodone bitartrate/homatropine	hydrocodone-homatropine
methylbromide	
hydrocodone bitartrate/pseudoephedrine	Hycofenix
HCl/guaifenesin	
hydrocodone polistirex/chlorpheniramine polistirex	TussiCaps
hydrocodone polistirex/chlorpheniramine polistirex	Tussionex Pennkinetic ER

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

Generic Name	Brand Name
hydrocodone polistirex/chlorpheniramine polistirex	hydrocodone-chlorpheniramine
hydrocortisone	Cortef
hydrocortisone	hydrocortisone
hydrocortisone acetate/aloe vera	Nucort
hydrocortisone acetate/aloe vera	hydrocortisone acet-aloe vera
hydrocortisone acetate/pramoxine HCl	Analpram-HC
hydrocortisone acetate/pramoxine HCl	Epifoam
hydrocortisone acetate/pramoxine HCl	Mezparox-HC
hydrocortisone acetate/pramoxine HCl	Novacort
hydrocortisone acetate/pramoxine HCl	Pramosone
hydrocortisone acetate/pramoxine HCl	hydrocortisone-pramoxine
hydrocortisone acetate/pramoxine HCl/aloe polysaccharide	Novacort (with aloe)
hydrocortisone acetate/pramoxine HCl/emollient base	Pramosone E
hydrocortisone acetate/urea	U-Cort
hydrocortisone sod succinate	A-Hydrocort
hydrocortisone sod succinate	Solu-Cortef
hydrocortisone sodium succinate/PF	Solu-Cortef Act-O-Vial (PF)
hydrocortisone/aloe vera	Anti-Itch(hydrocortisone)-Aloe
hydrocortisone/aloe vera	Cortisone with Aloe
hydrocortisone/aloe vera	Cortizone-10 with aloe
hydrocortisone/aloe vera	Hydrocortisone Plus
hydrocortisone/aloe vera	Hydroskin with Aloe
hydrocortisone/aloe vera	hydrocortisone-aloe vera
hydrocortisone/aloe vera/vitamin E acetate/vitamins A and D	Anti-Itch (HC) with Aloe-Vit E
hydrocortisone/aloe vera/vitamin E acetate/vitamins A and D	Anti-Itch Plus
hydrocortisone/emollient combination no.45	Pediaderm HC
hydrocortisone/mineral oil/petrolatum,white	hydrocortisone-min oil-wht pet
hydrocortisone/skin cleanser combination no.25	Aqua Glycolic HC
hydrocortisone/skin cleanser combination no.35	Dermasorb HC Complete Kit
ibuprofen	Addaprin
ibuprofen	Children's Ibu-Drops
ibuprofen	Children's Ibuprofen
ibuprofen	Ibuprofen IB
ibuprofen	Ibuprofen Jr Strength
ibuprofen	Infant's Ibuprofen
ibuprofen	Infants Ibu-Drops
ibuprofen	Medi-Profen
ibuprofen	Wal-Profen
ibuprofen	ibuprofen
ibuprofen/diphenhydramine HCl	Ibuprofen PM
ibuprofen/diphenhydramine HCl	ibuprofen-diphenhydramineHCl
ibuprofen/diphenhydramine citrate	Ibuprofen PM
ibuprofen/phenylephrine HCl	Advil Congestion Relief
ibuprofen/phenylephrine HCl	Congestion Relief(ibuprof-PE)
ibuprofen/pseudoephedrine HCl	Advil Cold and Sinus
ibuprofen/pseudoephedrine HCl	Cold and Sinus Pain Relief
ibuprofen/pseudoephedrine HCl	Cold-Sinus Relief

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

Generic Name	Brand Name
ibuprofen/pseudoephedrine HCl	Ibuprofen Cold
ibuprofen/pseudoephedrine HCl	Ibuprofen Cold-Sinus(withPSE)
ibuprofen/pseudoephedrine HCl	Wal-Profen Cold-Sinus
ibuprofen/pseudoephedrine HCl	Wal-Profen D Cold and Sinus
indacaterol maleate	Arcapta Neohaler
indacaterol maleate/glycopyrrolate	Utibron Neohaler
ipratropium bromide	Atrovent HFA
ipratropium bromide	ipratropium bromide
ipratropium bromide/albuterol sulfate	Combivent Respimat
ipratropium bromide/albuterol sulfate	DuoNeb
ipratropium bromide/albuterol sulfate	ipratropium-albuterol
ketotifen fumarate	Alaway
ketotifen fumarate	Allergy Eye (ketotifen)
ketotifen fumarate	Antihistamine Eye Drops
ketotifen fumarate	Children's Alaway
ketotifen fumarate	Eye Itch Relief
ketotifen fumarate	Itchy Eye Drops
ketotifen fumarate	Wal-Zyr (ketotifen)
ketotifen fumarate	Zaditor
ketotifen fumarate	ketotifen fumarate
levalbuterol HCl	Xopenex
levalbuterol HCl	Xopenex Concentrate
levalbuterol HCl	levalbuterol HCl
levalbuterol HCl	levalbuterol HCl (bulk)
levalbuterol tartrate	Xopenex HFA
levalbuterol tartrate	levalbuterol tartrate
levocetirizine dihydrochloride	24HR Allergy Relief
levocetirizine dihydrochloride	Xyzal
levocetirizine dihydrochloride	levocetirizine
levocetirizine dihydrochloride	levocetirizine (bulk)
lodoxamide tromethamine	Alomide
loratadine	Alavert
loratadine	Allerclear
loratadine	Allergy Relief (loratadine)
loratadine	Children's Allergy Relief(lor)
loratadine	Children's Claritin
loratadine	Children's Loratadine
loratadine	Claritin
loratadine	Claritin Liqui-Gel
loratadine	Claritin RediTabs
loratadine	Loradamed
loratadine	Non-Drowsy Allergy
loratadine	Vicks QlearQuil Allergy
loratadine	Wal-itin
loratadine	loratadine
loratadine	loratadine (bulk)
loratadine, micronized	loratadine, micronized (bulk)
loratadine/pseudoephedrine sulfate	Alavert D-12 Allergy-Sinus
loratadine/pseudoephedrine sulfate	AllerClear D-12hr
loratadine/pseudoephedrine sulfate	AllerClear D-24hr
loratadine/pseudoephedrine sulfate	Allergy Relief D-24hr

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

Generic Name	Brand Name
loratadine/pseudoephedrine sulfate	Allergy Relief D12
loratadine/pseudoephedrine sulfate	Allergy Relief,NasalDecongest
loratadine/pseudoephedrine sulfate	Allergy Relief-D (loratadine)
loratadine/pseudoephedrine sulfate	Allergy and Congestion Relief
loratadine/pseudoephedrine sulfate	Allergy-Congestion Relief-D
loratadine/pseudoephedrine sulfate	Claritin-D 12 Hour
loratadine/pseudoephedrine sulfate	Claritin-D 24 Hour
loratadine/pseudoephedrine sulfate	Lorata-D
loratadine/pseudoephedrine sulfate	Loratadine-D
loratadine/pseudoephedrine sulfate	Wal-Itin D 12 Hour
loratadine/pseudoephedrine sulfate	Wal-itin D
loratadine/pseudoephedrine sulfate	lorata-dine D
loratadine/pseudoephedrine sulfate	loratadine-pseudoephedrine
meloxicam	Mobic
meloxicam	meloxicam
mepolizumab	Nucala
metaproterenol sulfate	metaproterenol
methylprednisolone	Medrol
methylprednisolone	Medrol (Pak)
methylprednisolone	Methylpred DP
methylprednisolone	methylprednisolone
methylprednisolone acetate	Depo-Medrol
methylprednisolone acetate	P-Care D40
methylprednisolone acetate	P-Care D80
methylprednisolone acetate	ReadySharpMethylprednisolone
methylprednisolone acetate	methylprednisolone acetate
methylprednisolone acetate in sodium chloride,iso-osmotic/PF	methylpredac(PF)-NaCl,iso-osm
methylprednisolone acetate in sterile water for injection	methylprednisoloneacet-water
methylprednisolone acetate/bupivacaine HCl	Physicians EZ Use M-Pred
methylprednisolone acetate/bupivacaine HCl in sterile water	methylprednisolac-bupivac-wat
methylprednisolone acetate/norflurane/HFC 245fa	Medroloan II SUIK
methylprednisolone acetate/norflurane/HFC 245fa	Medroloan SUIK
methylprednisolone acetate/norflurane/HFC 245fa	P-Care D40G
methylprednisolone acetate/norflurane/HFC 245fa	P-Care D80G
methylprednisolone sodium succinate	Solu-Medrol
methylprednisolone sodium succinate	methylprednisolone sodiumsucc
methylprednisolone sodium succinate/PF	Solu-Medrol (PF)
methylprednisolone, micronized	methylprednisolone, mic(bulk)
mometasone furoate	Asmanex HFA
mometasone furoate	Asmanex Twisthaler
mometasone furoate	Nasonex
mometasone furoate	mometasone
mometasone furoate	mometasone furoate (bulk)
mometasone furoate/ammonium lactate	Momexin
mometasone furoate/formoterol fumarate	Dulera
montelukast sodium	Singulair
montelukast sodium	montelukast
montelukast sodium	montelukast (bulk)

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

Generic Name	Brand Name
naproxen	naproxen
naproxen sodium	All Day Pain Relief
naproxen sodium	All Day Relief
naproxen sodium	Flanax (naproxen)
naproxen sodium	Midol (naproxen)
naproxen sodium	Wal-Proxen
naproxen sodium	naproxen sodium
naproxen sodium/pseudoephedrine HCl	Aleve Cold and Sinus
naproxen sodium/pseudoephedrine HCl	Aleve Sinus and Headache
naproxen sodium/pseudoephedrine HCl	All Day Pain Relief Sinus,Cold
naproxen sodium/pseudoephedrine HCl	Sinus and Cold-D
nedocromil sodium	Alocril
olodaterol HCl	Striverdi Respimat
olopatadine HCl	Pataday
olopatadine HCl	Patanase
olopatadine HCl	Patanol
olopatadine HCl	Pazeo
olopatadine HCl	olopatadine
omalizumab	Xolair
phenylephrine HCl/acetaminophen	AcetaminophenCongestion-Pain
phenylephrine HCl/acetaminophen	Contac Cold-Flu Day
phenylephrine HCl/acetaminophen	DayTime Sinus
phenylephrine HCl/acetaminophen	Daytime Sinus-Congestion
phenylephrine HCl/acetaminophen	Mapap Sinus Max Strength(PE)
phenylephrine HCl/acetaminophen	Non-Aspirin Sinus
phenylephrine HCl/acetaminophen	Pain Relief Sinus PE
phenylephrine HCl/acetaminophen	Pyroxate Cold andCongestion
phenylephrine HCl/acetaminophen	Sinus Congestion and Pain
phenylephrine HCl/acetaminophen	Sinus Headache PE
phenylephrine HCl/acetaminophen	Sinus Maximum Strength
phenylephrine HCl/acetaminophen	Sinus Pain-Pressure (PE)
phenylephrine HCl/acetaminophen	Sinus Relief (Non-Drowsy)
phenylephrine HCl/acetaminophen	Sudafed PE Pressure-Pain
phenylephrine HCl/acetaminophen	Suphedrine PE SinusHeadache
phenylephrine HCl/acetaminophen	Tylenol Sinus CongestionPain
phenylephrine HCl/acetaminophen	Vicks Dayquil Sinex
phenylephrine HCl/acetaminophen	Vicks QlearQuil DaytimeSinus
phenylephrine HCl/acetaminophen	Vicks Sinex Daytime
phenylephrine HCl/acetaminophen	Wal-Phed PE SinusHeadache
phenylephrine	Allergy Multi-Symptom
HCl/acetaminophen/chlorpheniramine	
phenylephrine	Allergy Relief Multi-Symptom
HCl/acetaminophen/chlorpheniramine	
phenylephrine	Allergy Relief(chlorphen-acet)
HCl/acetaminophen/chlorpheniramine	
phenylephrine	Allergy Sinus PE
HCl/acetaminophen/chlorpheniramine	
phenylephrine	Contac Cold-Flu Day andNight
HCl/acetaminophen/chlorpheniramine	
phenylephrine	Contac Cold-Flu Max Strength
HCl/acetaminophen/chlorpheniramine	

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

Generic Name	Brand Name
phenylephrine	Dristan Cold
HCl/acetaminophen/chlorpheniramine phenylephrine	Effervescent Cold Relief Plus
HCl/acetaminophen/chlorpheniramine phenylephrine	Medicidin-D
HCl/acetaminophen/chlorpheniramine phenylephrine	Norel AD
HCl/acetaminophen/chlorpheniramine phenylephrine	Sinus Congest-PainDay-Night
HCl/acetaminophen/chlorpheniramine phenylephrine	SinusCongestion-Pain(chlorph)
HCl/acetaminophen/chlorpheniramine phenylephrine	Sinutrol PE
HCl/acetaminophen/chlorpheniramine phenylephrine HCl/acetaminophen/doxylamine succinate	DayTime and NiteTime Sinus
phenylephrine HCl/acetaminophen/doxylamine succinate	NightTime Sinus
phenylephrine HCl/acetaminophen/doxylamine succinate	Nighttime Sinus-Congestion
phenylephrine HCl/acetaminophen/doxylamine succinate	Sinus Daytime-Nighttime
phenylephrine HCl/acetaminophen/doxylamine succinate	Vicks Nyquil Sinex
phenylephrine HCl/acetaminophen/doxylamine succinate	Vicks QlearQuil NighttimeSinus
phenylephrine HCl/chlophedianol HCl/guaifenesin	Donatussin Pediatric
phenylephrine HCl/chlophedianol HCl/guaifenesin	Vanacof GPE
phenylephrine HCl/chlophedianol HCl/guaifenesin	phenylephrine-chlophedianol-GG
phenylephrine HCl/codeine	Phenflu CD
phosphate/acetaminophen/guaifen	
phenylephrine HCl/codeine	Phenflu CDX
phosphate/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Children's Cold-Cough-Sore
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Children's MucinexCold-Fever
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Cold Head Congestion SeverDay
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Cold Severe Congestion
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Cold and Flu Severe
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Cold-Cough Sinus Relief PE
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Decorel Forte Plus
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Delsym Cough-Cold Daytime
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Dometuss G
HBr/acetaminophen/guaifen	

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

Generic Name	Brand Name
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Fast Mucus Relief SevereCold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Head Congestion Cold Relief
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Herbiomed Severe Cold-FluM-S
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucinex Cold,Flu,Sore Throat
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucinex Fast-MaxCold-Flu-Thrt
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucinex Fast-Max SevereCold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucinex Sinus-MaxPressure-Cgh
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucinex Sinus-Max SevCong(DM)
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucus Relief Cold-Flu-SoreThr
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucus Relief Plus
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucus Relief SevCongest-Cold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Mucus Relief Severe Cold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Multi-Symptom Cold (PE)
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Non-Pseudo Cold Relief
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Pain Relief Cold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Pressure-Pain PE Plus Cold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Pressure-Pain-Cold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Rompe Pecho Max MultiSymptoms
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Severe Cold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Severe Cold Multi-Symptom
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Severe Cold and Flu (PE)
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Sudafed PEPressure-Pain-Cold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Tussin CF Max Severe M-SCold
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Tylenol Cold and Flu Severe
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Vicks DayQuil SevereCold-Flu

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

Generic Name	Brand Name
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Wal-Phed PE Cold-Cough
phenylephrine HCl/dextromethorphan HBr/acetaminophen/guaifen	Wal-Phed PE Pressure+Pain+Cold
phenylephrine HCl/diphenhydramine HCl	Aldex-CT
phenylephrine HCl/diphenhydramine HCl	Allergy and Sinus Relief
phenylephrine HCl/diphenhydramine HCl	Child Allergy Plus Congestion
phenylephrine HCl/diphenhydramine HCl	Child Benadryl Plus Congestion
phenylephrine HCl/diphenhydramine HCl	Child's Benadryl-D Allergy-Sin
phenylephrine HCl/diphenhydramine HCl	Children Night Time Cold-Cough
phenylephrine HCl/diphenhydramine HCl	Childs Triacting Cold-Cough
phenylephrine HCl/diphenhydramine HCl	Cold and Cough(diphenhydr-pe)
phenylephrine HCl/diphenhydramine HCl	Dimetapp Cold-Congestion
phenylephrine HCl/diphenhydramine HCl	Nighttime Cough-Cold
phenylephrine HCl/diphenhydramine HCl	Triaminic Cold and Cough NT(PE)
phenylephrine HCl/diphenhydramine HCl	diphenhydramine-phenylephrine
phenylephrine HCl/promethazine HCl	Promethazine VC
phenylephrine HCl/promethazine HCl	promethazine-phenylephrine
phenylephrine HCl/pyrilamine maleate	Aldex D
phenylephrine HCl/pyrilamine maleate	Glen PE
phenylephrine HCl/pyrilamine maleate	Poly Hist Forte (pyrilamine)
phenylephrine HCl/pyrilamine maleate	Pyril D
phenylephrine HCl/pyrilamine maleate	Vazotab (pyrilamine)
phenylephrine HCl/pyrilamine maleate	pyrilamine-phenylephrine
phenylephrine HCl/triprolidine HCl	Histex PE
phenylephrine HCl/triprolidine HCl	Sinus Nighttime
prednisolone	Millipred
prednisolone	Millipred DP
prednisolone	Prelone
prednisolone	prednisolone
prednisolone acetate	Flo-Pred
prednisolone acetate, micronized	prednisolone ac, micro (bulk)
prednisolone, micronized	prednisolone, micro (bulk)
prednisone	Deltasone
prednisone	Prednisone Intensol
prednisone	Rayos
prednisone	prednisone
prednisone micronized	prednisone micronized (bulk)
promethazine HCl	Phenadoz
promethazine HCl	Phenergan
promethazine HCl	Promethegan
promethazine HCl	promethazine
promethazine HCl	promethazine (bulk)
promethazine HCl in 0.9 % sodium chloride	promethazine in 0.9 % NaCl
promethazine HCl/codeine	promethazine-codeine
promethazine HCl/dextromethorphan HBr	promethazine-DM
promethazine/phenylephrine HCl/codeine	Promethazine VC-Codeine
promethazine/phenylephrine HCl/codeine	promethazine-phenyleph-codeine
pseudoephedrine HCl/acetaminophen	Nexafed Sinus Pressure-Pain
pseudoephedrine HCl/acetaminophen	Sinus Headache Degongestant

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

Generic Name	Brand Name
pseudoephedrine	Allergy Sinus-D
HCl/acetaminophen/chlorpheniramine pseudoephedrine	Non-Aspirin Allergy Sinus
HCl/acetaminophen/chlorpheniramine pseudoephedrine	Non-Aspirin Child's Cold
HCl/acetaminophen/chlorpheniramine pseudoephedrine	Pain Reliever Allergy Sinus
HCl/acetaminophen/chlorpheniramine pseudoephedrine HCl/acrivastine	Semprex-D
pseudoephedrine HCl/chlophedianol HCl	Rondec-D
pseudoephedrine HCl/chlophedianol HCl/guaifenesin	Certuss-D
pseudoephedrine HCl/chlophedianol HCl/guaifenesin	Vanacof DX
pseudoephedrine HCl/chlophedianol HCl/guaifenesin	Vanatab DX
pseudoephedrine HCl/chlorpheniramine maleate/bellad alk	Respa-AR
pseudoephedrine HCl/codeine phosphate	Codar D
pseudoephedrine HCl/codeine phosphate/acetaminophen/guaifen	Maxiflu CD
pseudoephedrine HCl/codeine phosphate/acetaminophen/guaifen	Maxiflu CDX
pseudoephedrine HCl/codeine phosphate/guaifenesin	Cheratussin DAC
pseudoephedrine HCl/codeine phosphate/guaifenesin	Coditussin DAC
pseudoephedrine HCl/codeine phosphate/guaifenesin	Guaifenesin DAC
pseudoephedrine HCl/codeine phosphate/guaifenesin	Lortuss EX
pseudoephedrine HCl/codeine phosphate/guaifenesin	Phenylhistine
pseudoephedrine HCl/codeine phosphate/guaifenesin	Tricode GF
pseudoephedrine HCl/codeine phosphate/guaifenesin	Tusnel C
pseudoephedrine HCl/codeine phosphate/guaifenesin	Virtussin DAC
pseudoephedrine HCl/codeine phosphate/guaifenesin	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

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

Generic Name	Brand Name
pseudoephedrine HCl/codeine	Zodryl DEC 80
phosphate/guaifenesin	
pseudoephedrine HCl/codeine/chlorpheniramine	Phenylhistine DH
pseudoephedrine HCl/hydrocodone bitartrate	Rezira
pyrilamine maleate	pyrilamine maleate (bulk)
pyrilamine maleate/chlophedianol HCl	DayClear Allergy Relief
pyrilamine maleate/chlophedianol HCl	Ninjacof
pyrilamine maleate/chlophedianol HCl	VanaCof AC
pyrilamine maleate/chlophedianol HCl	VanaTab AC
pyrilamine maleate/chlophedianol HCl	Vanacof-8
pyrilamine maleate/chlophedianol HCl/acetaminophen	Ninjacof-A
pyrilamine maleate/dextromethorphan HBr	Capron DM
pyrilamine maleate/dextromethorphan HBr	Capron DMT
pyrilamine maleate/phenylephrine	Pro-Chlo
HCl/chlophedianol HCl	
pyrilamine maleate/phenylephrine	Codituss DM
HCl/dextromethorphan HBr	
pyrilamine maleate/pseudoephedrine	Ninjacof-D
HCl/chlophedianol HCl	
racepinephrine HCl	Asthmanefrin Refill
racepinephrine HCl	Asthmanefrin Starter Kit
racepinephrine HCl	S2 Racepinephrine
racepinephrine HCl	racepinephrine
racepinephrine HCl	racepinephrine (bulk)
reslizumab	Cinqair
revefenacin	Yupelri
roflumilast	Daliresp
salmeterol xinafoate	Serevent Diskus
terbutaline sulfate	terbutaline
theophylline anhydrous	Elixophyllin
theophylline anhydrous	Theo-24
theophylline anhydrous	Theochron
theophylline anhydrous	theophylline
thonzylamine HCl/chlophedianol HCl	POLY HIST PD
thonzylamine HCl/phenylephrine HCl	Nasopen PE
thonzylamine HCl/phenylephrine	Vanacof APE
HCl/chlophedianol HCl	
thonzylamine HCl/phenylephrine	Poly-Hist DM (thonzylamine)
HCl/dextromethorphan HBr	
tiotropium bromide	Spiriva Respimat
tiotropium bromide	Spiriva with HandiHaler
tiotropium bromide/olodaterol HCl	Stiolto Respimat
tranilast	tranilast (bulk)
triamcinolone acetonide	24 Hour Nasal Allergy
triamcinolone acetonide	Arze-Ject-A
triamcinolone acetonide	Children's Nasacort
triamcinolone acetonide	Kenalog
triamcinolone acetonide	Kenalog-80
triamcinolone acetonide	Nasacort
triamcinolone acetonide	Nasacort AQ

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

Generic Name	Brand Name
triamcinolone acetonide	Nasal Allergy
triamcinolone acetonide	P-Care K40
triamcinolone acetonide	P-Care K80
triamcinolone acetonide	Pod-Care 100K
triamcinolone acetonide	Pro-C-Dure 5
triamcinolone acetonide	Pro-C-Dure 6
triamcinolone acetonide	ReadySharp Triamcinolone
triamcinolone acetonide	Zilretta
triamcinolone acetonide	triamcinolone acetonide
triamcinolone acetonide	triamcinolone acetonide (bulk)
triamcinolone acetonide in 0.9 % sodium chloride	triamcinolone acetone-0.9%NaCl
triamcinolone acetonide/0.9% sodium chloride/PF	triamcinol ac (PF) in0.9%NaCl
triamcinolone acetonide/dimethicone	Ellzia Pak
triamcinolone acetonide/dimethicone/silicone, adhesive	DermaSilkRx SDS
triamcinolone acetonide/dimethicone/silicone, adhesive	DermaWerx SDS
triamcinolone acetonide/dimethicone/silicone, adhesive	DermacinRx SilaPak
triamcinolone acetonide/dimethicone/silicone, adhesive	NuTriRx
triamcinolone acetonide/dimethicone/silicone, adhesive	SanaDermRx
triamcinolone acetonide/dimethicone/silicone, adhesive	Sure Result Tac Pak
triamcinolone acetonide/dimethicone/silicone, adhesive	Tri-Sila
triamcinolone acetonide/dimethicone/silicone, adhesive	Whytederm TDPak
triamcinolone acetonide/dimethicone/silicone, adhesive	Whytederm Trilasil Pak
triamcinolone acetonide/emollient combination no.45	Pediaderm TA
triamcinolone acetonide/emollient combination no.86	Dermasorb TA Complete Kit
triamcinolone acetonide/lidocaine HCl	EZ Use Joint-Tunnel-Trigger
triamcinolone acetonide/lidocaine HCl	Lidocilone I
triamcinolone acetonide/lidocaine/prilocaine	DermacinRx Cinlone-I CPI
triamcinolone diacetate in 0.9 % sodium chloride	triamcinolone diacet-0.9%NaCl
triamcinolone diacetate in 0.9 % sodium chloride/PF	triamcinolonedia(PF)-0.9%NaCl
triamcinolone hexacetonide	Aristospan Intra-Articular
triamcinolone hexacetonide	Aristospan Intralesional
triamcinolone hexacetonide	triamcinolone hexacetone(bulk)
triamcinolone hexacetonide, micronized	triamcin hexacet, micro (bulk)
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	P-Care K40G
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	P-Care K80G
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	Pod-Care 100KG

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

Generic Name	Brand Name
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	Triloan II SUIK
triamcinolone/norflurane and pentafluoropropane (HFC 245fa)	Triloan SUIK
trimeprazine tartrate	trimeprazine tartrate (bulk)
tripelennamine HCl	tripelennamine (bulk)
triprolidine HCl	Histex (triprolidine)
triprolidine HCl	Histex PD
triprolidine HCl	Histex PDX
triprolidine HCl	M-Hist PD
triprolidine HCl	VanaClear PD
triprolidine HCl	Vanahist PD
triprolidine HCl	triprolidine HCl
triprolidine HCl	triprolidine HCl (bulk)
triprolidine HCl/phenylephrine HCl/codeine phosphate	Histex-AC
triprolidine HCl/phenylephrine HCl/dextromethorphan HBr	Histex DM
triprolidine HCl/pseudoephedrine HCl	Aprodine
triprolidine HCl/pseudoephedrine HCl/chlophedianol HCl	Trymine CD
umeclidinium bromide	Incruse Ellipta
umeclidinium bromide/vilanterol trifenate	Anoro Ellipta
zafirlukast	Accolate
zafirlukast	zafirlukast
zileuton	Zyflo
zileuton	Zyflo CR
zileuton	zileuton

Nonsteroidal Anti-Inflammatory Drugs

CHLORPHENIRAMINE MALEATE/PHENYLEPHRINE HCL/IBUPROFEN	Advil Allergy-Congestion Rlf
CHLORPHENIRAMINE MALEATE/PSEUDOEPHEDRINE HCL/IBUPROFEN	Advil Allergy Sinus
HYDROCODONE/IBUPROFEN	Ibudone
HYDROCODONE/IBUPROFEN	Reprexain
HYDROCODONE/IBUPROFEN	Vicoprofen
HYDROCODONE/IBUPROFEN	Xylon 10
HYDROCODONE/IBUPROFEN	hydrocodone-ibuprofen
IBUPROFEN	Children's Ibuprofen
IBUPROFEN	ibuprofen
IBUPROFEN/OXYCODONE HCL	ibuprofen-oxycodone
IBUPROFEN/PHENYLEPHRINE HCL	Advil Congestion Relief
IBUPROFEN/PHENYLEPHRINE HCL	Congestion Relief(ibuprof-PE)
IBUPROFEN/PSEUDOEPHEDRINE HCL	Advil Cold and Sinus
IBUPROFEN/PSEUDOEPHEDRINE HCL	Cold and Sinus Pain Relief
IBUPROFEN/PSEUDOEPHEDRINE HCL	Cold-Sinus Relief
IBUPROFEN/PSEUDOEPHEDRINE HCL	Ibuprofen Cold
IBUPROFEN/PSEUDOEPHEDRINE HCL	Ibuprofen Cold-Sinus(withPSE)
IBUPROFEN/PSEUDOEPHEDRINE HCL	Wal-Profen Cold-Sinus
IBUPROFEN/PSEUDOEPHEDRINE HCL	Wal-Profen D Cold and Sinus

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

Generic Name	Brand Name
INDOMETHACIN	indomethacin
NAPROXEN SODIUM	naproxen sodium
NAPROXEN SODIUM/PSEUDOEPHEDRINE 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	All Day Pain Relief Sinus,Cold
NAPROXEN SODIUM/PSEUDOEPHEDRINE HCL	Sinus and Cold-D
OXAPROZIN	oxaprozin
PIROXICAM	piroxicam
SUMATRIPTAN SUCCINATE/NAPROXEN SODIUM	Treximet
celecoxib	Celebrex
celecoxib	celecoxib
diclofenac potassium	Cambia
diclofenac potassium	Cataflam
diclofenac potassium	Zipsor
diclofenac potassium	diclofenac potassium
diclofenac sodium	Voltaren-XR
diclofenac sodium/misoprostol	Arthrotec 50
diclofenac sodium/misoprostol	Arthrotec 75
diclofenac sodium/misoprostol	diclofenac-misoprostol
diclofenac submicronized	Zorvolex
etodolac	Lodine
etodolac	etodolac
fenoprofen calcium	Fenortho
fenoprofen calcium	Nalfon
fenoprofen calcium	ProFeno
fenoprofen calcium	fenoprofen
flurbiprofen	Ansaid
ibuprofen	Advil
ibuprofen	Advil Liqui-Gel
ibuprofen	Advil Migraine
ibuprofen	Child Ibuprofen
ibuprofen	Children's Advil
ibuprofen	Children's Medi-Profen
ibuprofen	Children's Motrin
ibuprofen	Children's Profen IB
ibuprofen	I-Prin
ibuprofen	IBU
ibuprofen	IBU-200
ibuprofen	Ibu-Drops
ibuprofen	Infant's Advil
ibuprofen	Infant's Medi-Profen
ibuprofen	Infant's Motrin

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

Generic Name	Brand Name
ibuprofen	Infants ProfenIB
ibuprofen	Motrin IB
ibuprofen	Provil
ibuprofen/diphenhydramine HCl	Advil PM Liqui-Gels
ibuprofen/diphenhydramine citrate	Advil PM
ibuprofen/diphenhydramine citrate	Motrin PM
ibuprofen/diphenhydramine citrate	ibuprofen-diphenhydramine cit
ibuprofen/famotidine	Duexis
indomethacin	Indocin
indomethacin	indomethacin
indomethacin, submicronized	Tivorbex
ketoprofen	ketoprofen
ketorolac tromethamine	ketorolac
meclofenamate sodium	meclofenamate
mefenamic acid	Ponstel
mefenamic acid	mefenamic acid
meloxicam	Qmiiz ODT
meloxicam, submicronized	Vivlodex
nabumetone	nabumetone
naproxen	EC-Naprosyn
naproxen	EC-Naproxen
naproxen	Naprosyn
naproxen sodium	Aleve
naproxen sodium	Anaprox
naproxen sodium	Anaprox DS
naproxen sodium	Mediproxen
naproxen sodium	Naprelan CR
naproxen sodium/diphenhydramine HCl	Aleve PM
naproxen/esomeprazole magnesium	Vimovo
oxaprozin	Daypro
oxaprozin	oxaprozin
piroxicam	Feldene
piroxicam	piroxicam
sulindac	sulindac
tolmetin sodium	tolmetin
Diuretics (Thiazides, Potassium Sparing, Loop Diuretics)	
amiloride HCl	amiloride
amiloride HCl/hydrochlorothiazide	amiloride-hydrochlorothiazide
bumetanide	bumetanide
chlorothiazide	Diuril
chlorothiazide	chlorothiazide
chlorothiazide sodium	Diuril IV
chlorothiazide sodium	chlorothiazide sodium
chlorthalidone	chlorthalidone
eplerenone	Inspra
eplerenone	eplerenone
ethacrynate sodium	Sodium Edecrin
ethacrynate sodium	ethacrynate sodium
ethacrynic acid	Edecrin
ethacrynic acid	ethacrynic acid
furosemide	Lasix

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

Generic Name	Brand Name
furosemide	furosemide
furosemide	furosemide (bulk)
furosemide in 0.9 % sodium chloride	furosemide in 0.9 % NaCl
furosemide/dextrose 5 % in water	furosemide in dextrose 5 %
hydrochlorothiazide	Microzide
hydrochlorothiazide	hydrochlorothiazide
hydrochlorothiazide	hydrochlorothiazide (bulk)
indapamide	indapamide
methyclothiazide	methyclothiazide
metolazone	Zaroxolyn
metolazone	metolazone
spironolactone	Aldactone
spironolactone	CaroSpir
spironolactone	spironolactone
spironolactone	spironolactone (bulk)
spironolactone, micronized	spironolactone micro (bulk)
spironolactone/hydrochlorothiazide	Aldactazide
spironolactone/hydrochlorothiazide	spironolacton-hydrochlorothiaz
toremide	Demadex
toremide	toremide
triamterene	Dyrenium
triamterene	triamterene
triamterene	triamterene (bulk)
triamterene/hydrochlorothiazide	Dyazide
triamterene/hydrochlorothiazide	Maxzide
triamterene/hydrochlorothiazide	Maxzide-25mg
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
trichlormethiazide	trichlormethiazide (bulk)
Everolimus	
everolimus	Afinitor
everolimus	Afinitor Disperz
everolimus	Zortress
Sirolimus	
sirolimus	Rapamune
sirolimus	sirolimus

Appendix H. Specifications Defining Parameters for this Request

This request executed the Cohort Identification and Descriptive Analysis (CIDA) and Propensity Score Analysis (PSA) modules within the Query Request Package, version 9.7.0, with custom programming to assess the risk for angioedema associated with sacubitril/valsartan (SV) compared to angiotensin-converting enzyme inhibitors (ACEIs) or to angiotensin II receptor blockers (ARBs, excluding SV) among heart failure patients in the Sentinel Distributed Database (SDD).

Query Period: 7/7/2015 - data completeness
Coverage Requirement: Medical and drug coverage
Enrollment Requirement: 183 days
Enrollment Gap: 45 days
Age Groups: 18-44, 45-54, 55-64, 65+ years
Output Requested: Attrition table, Kaplan–Meier curves
Additional Programming Needed: Allow SV switchers to re-enter comparisons requiring prior comparator use by altering PSA pre-processing rules
Notes: Ran against the same ETLs of the SCDM as cder_mpl2r_wp016

	Prior comparator use (183 days); angioedema SV users allowed to be in primary exposure group AND comparator group				Prior comparator use (14 days); angioedema SV users allowed to be in primary exposure group AND comparator group			
	Comparison 1		Comparison 2		Comparison 3		Comparison 4	
Drug/Exposure	SV	ACEI	SV	ARBs	SV	ACEI	SV	ARBs
Exposure/Comparator	SV, ARBs	ACEI, ARBs, SV	SV, ACEI	ACEI, ARBs, SV	SV, ARBs	ACEI, ARBs, SV	SV, ACEI	ACEI, ARBs, SV
Incident with Respect to:	Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply	
Incidence Assessment	183		183		183		183	
Washout (days)	183		183		183		183	
Cohort Definition	First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode	
Stockpiling Overlapping Claims	Default		Default		Default		Default	
Episode Gap (days)	14		14		14		14	
Episode Extension Period (days)	14		14		14		14	
Maximum Episode Duration (days)	365		365		365		365	
Censor Criteria	ACEI	SV	ARBs	SV	ACEI	SV	ARBs	SV
	ARBs, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ACEI, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ARBs, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ACEI, end of treatment, outcome occurrence, disenrollment, recorded death, data end date	
Inclusion/Exclusion*	Heart failure		Heart failure		Heart failure		Heart failure	
Pre-Existing Condition	Heart failure		Heart failure		Heart failure		Heart failure	
Include/Exclude	Include		Include		Include		Include	
Lookback Period (days)	-183, 0		-183, 0		-183, 0		-183, 0	

Appendix H. Specifications Defining Parameters for this Request

	Prior comparator use (183 days); angioedema SV users allowed to be in primary exposure group AND comparator group				Prior comparator use (14 days); angioedema SV users allowed to be in primary exposure group AND comparator group			
	Comparison 1		Comparison 2		Comparison 3		Comparison 4	
Pre-Existing Condition	ACEI	--	ARBs	--	ACEI	--	ARBs	--
Include/Exclude	Include	--	Include	--	Include	--	Include	--
Care Setting/PDX	Any	--	Any	--	Any	--	Any	--
Lookback Period (days)	-183, 0	--	-183, 0	--	-14, 0	--	-14, 0	--
Inclusion Assessment	Dispensing date or days supply	--	Dispensing date or days supply	--	Dispensing date or days supply	--	Dispensing date or days supply	--
Pre-Existing Condition	ACEI, ARBs	SV, ARBs	ARBs, ACEI	SV, ACEI	ACEI, ARBs	SV, ARBs	ARBs, ACEI	SV, ACEI
Include/Exclude	Exclude	Exclude	Exclude	Exclude	Exclude	Exclude	Exclude	Exclude
Care Setting/PDX	Any	Any	Any	Any	Any	Any	Any	Any
Lookback Period	0	0	0	0	0	0	0	0
Inclusion Assessment	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date
Event/Outcome	Angioedema		Angioedema		Angioedema		Angioedema	
Event/Outcome	Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient	
Care Setting/PDX	Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient	
Washout (days)	0		0		0		0	
Blackout Period (days)	0		0		0		0	
Propensity Score Matching	See Covar_Categories tab		See Covar_Categories tab		See Covar_Categories tab		See Covar_Categories tab	
Covariates	See Covar_Categories tab		See Covar_Categories tab		See Covar_Categories tab		See Covar_Categories tab	
Matching Ratio	1:1		1:1		1:1		1:1	
Matching Caliper Settings	0.05		0.05		0.05		0.05	
Analysis Type	Conditional and unconditional PS stratification with deciles		Conditional and unconditional PS stratification with deciles		Conditional and unconditional		Conditional and unconditional	
Sensitivity Analysis	PS stratification with deciles		PS stratification with deciles		--		--	
Subgroup Analyses	Angioedema		Angioedema		Angioedema		Angioedema	
Stratifying variable	Angioedema		Angioedema		Angioedema		Angioedema	
Evaluation Window (days)	-183, -1		-183, -1		-183, -1		-183, -1	
Re-matching	Re-matching should be done with the pre-matched cohort		Re-matching should be done with the pre-matched cohort		Re-matching should be done with the pre-matched cohort		Re-matching should be done with the pre-matched cohort	
Stratifying variable	Angioedema		Angioedema		Angioedema		Angioedema	

Appendix H. Specifications Defining Parameters for this Request

	Prior comparator use (183 days); angioedema SV users allowed to be in primary exposure group AND comparator group		Prior comparator use (14 days); angioedema SV users allowed to be in primary exposure group AND comparator group	
	Comparison 1	Comparison 2	Comparison 3	Comparison 4
Evaluation Window (days) Re-matching	Pre-index enrollment history, -1 Re-matching should be done with the pre-matched cohort	Pre-index enrollment history, -1 Re-matching should be done with the pre-matched cohort	Pre-index enrollment history, -1 Re-matching should be done with the pre-matched cohort	Pre-index enrollment history, -1 Re-matching should be done with the pre-matched cohort
Stratifying variable Evaluation Window (days) Re-matching	Serious allergies -183, -1 Re-matching should be done with the pre-matched cohort	Serious allergies -183, -1 Re-matching should be done with the pre-matched cohort	Serious allergies -183, -1 Re-matching should be done with the pre-matched cohort	Serious allergies -183, -1 Re-matching should be done with the pre-matched cohort
Stratifying variable Re-matching	Age group Re-matching should be done with the pre-matched cohort	Age group Re-matching should be done with the pre-matched cohort	Age group Re-matching should be done with the pre-matched cohort	Age group Re-matching should be done with the pre-matched cohort
Stratifying variable Re-matching	Sex Re-matching should be done with the pre-matched cohort	Sex Re-matching should be done with the pre-matched cohort	Sex Re-matching should be done with the pre-matched cohort	Sex Re-matching should be done with the pre-matched cohort
Stratifying variable Re-matching	Race Re-matching should be done with the pre-matched cohort	Race Re-matching should be done with the pre-matched cohort	Race Re-matching should be done with the pre-matched cohort	Race Re-matching should be done with the pre-matched cohort
* Day 0 EOI/REF dispensing exclusion were not created in input files, but instead achieved by PSA pre-processing.				
International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-9/10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) codes are provided by Optum360. National Drug Codes (NDC) are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."				

Appendix H. Specifications Defining Parameters for this Request

	Prior comparator use (183 days); angioedema SV users allowed to be in primary exposure group AND comparator group Gap sensitivity analysis				Prior comparator use (183 days); serious angioedema SV users allowed to be in primary exposure group AND comparator group			
	Comparison 5		Comparison 6		Comparison 7		Comparison 8	
Drug/Exposure	SV	ACEI	SV	ARBs	SV	ACEI	SV	ARBs
Exposure/Comparator	SV, ARBs	ACEI, ARBs, SV	SV, ACEI	ACEI, ARBs, SV	SV, ARBs	ACEI, ARBs, SV	SV, ACEI	ACEI, ARBs, SV
Incident with Respect to Incidence Assessment	Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply	
Washout (days)	183		183		183		183	
Cohort Definition	First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode	
Stockpiling Overlapping Claims	Default		Default		Default		Default	
Episode Gap (days)	7		7		14		14	
Episode Extension Period (days)	7		7		14		14	
Maximum Episode Duration	365		365		365		365	
Censor Criteria	ACEI	SV	ARBs	SV	ACEI	SV	ARBs	SV
	ARBs, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ARBs, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ARBs, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ARBs, end of treatment, outcome occurrence, disenrollment, recorded death, data end date	
Inclusion/Exclusion*	Heart failure		Heart failure		Heart failure		Heart failure	
Pre-Existing Condition	Heart failure		Heart failure		Heart failure		Heart failure	
Include/Exclude	Include		Include		Include		Include	
Lookback Period (days)	-183, 0		-183, 0		-183, 0		-183, 0	
Pre-Existing Condition	ACEI	--	ARBs	--	ACEI	--	ARBs	--
Include/Exclude	Include	--	Include	--	Include	--	Include	--
Care Setting/PDX	Any	--	Any	--	Any	--	Any	--
Lookback Period (days)	-183, 0	--	-183, 0	--	-183, 0	--	-183, 0	--
Inclusion Assessment	Dispensing date or days supply	--	Dispensing date or days supply	--	Dispensing date or days supply	--	Dispensing date or days supply	--
Pre-Existing Condition	ACEI, ARBs	SV, ARBs	ARBs, ACEI	SV, ACEI	ACEI, ARBs	SV, ARBs	ARBs, ACEI	SV, ACEI
Include/Exclude	Exclude	Exclude	Exclude	Exclude	Exclude	Exclude	Exclude	Exclude
Care Setting/PDX	Any	Any	Any	Any	Any	Any	Any	Any
Lookback Period	0	0	0	0	0	0	0	0
Inclusion Assessment	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date	Dispensing date
Event/Outcome								

Appendix H. Specifications Defining Parameters for this Request

	Prior comparator use (183 days); angioedema SV users allowed to be in primary exposure group AND comparator group Gap sensitivity analysis		Prior comparator use (183 days); serious angioedema SV users allowed to be in primary exposure group AND comparator group	
	Comparison 5	Comparison 6	Comparison 7	Comparison 8
Event/Outcome	Angioedema	Angioedema	Serious Angioedema	Serious Angioedema
Care Setting/PDX	Inpatient, emergency department or outpatient	Inpatient, emergency department or outpatient	Inpatient or emergency department (ED) angioedema diagnosis requiring an intensive care unit admission, intubation, tracheostomy, or laryngoscopy occurring within 2 days of the date of hospital admission or ED visit	Inpatient or emergency department (ED) angioedema diagnosis requiring an intensive care unit admission, intubation, tracheostomy, or laryngoscopy occurring within 2 days of the date of hospital admission or ED visit
Washout (days)	0	0	0	0
Blackout Period (days)	0	0	0	0
Propensity Score Matching				
Covariates	See Covar_Categories tab	See Covar_Categories tab	See Covar_Categories tab	See Covar_Categories tab
Matching Ratio	1:1	1:1	1:1	1:1
Matching Caliper Settings	0.05	0.05	0.05	0.05
Analysis Type	Conditional and unconditional	Conditional and unconditional	Conditional and unconditional	Conditional and unconditional
Sensitivity Analysis	--	--	--	--
Subgroup Analyses				
Stratifying variable			Angioedema	Angioedema
Evaluation Window (days)			-183, -1	-183, -1
Re-matching			Re-matching should be done with the pre-matched cohort	Re-matching should be done with the pre-matched cohort
Stratifying variable			Angioedema	Angioedema
Evaluation Window (days)			Pre-index enrollment history, -1	Pre-index enrollment history, -1
Re-matching			Re-matching should be done with the pre-matched cohort	Re-matching should be done with the pre-matched cohort

Appendix H. Specifications Defining Parameters for this Request

	Prior comparator use (183 days); angioedema SV users allowed to be in primary exposure group AND comparator group Gap sensitivity analysis		Prior comparator use (183 days); serious angioedema SV users allowed to be in primary exposure group AND comparator group	
	Comparison 5	Comparison 6	Comparison 7	Comparison 8
Stratifying variable Evaluation Window (days) Re-matching			Serious allergies -183, -1 Re-matching should be done with the pre-matched cohort	Serious allergies -183, -1 Re-matching should be done with the pre-matched cohort
Stratifying variable Re-matching			Age group Re-matching should be done with the pre-matched cohort	Age group Re-matching should be done with the pre-matched cohort
Stratifying variable Re-matching			Sex Re-matching should be done with the pre-matched cohort	Sex Re-matching should be done with the pre-matched cohort
Stratifying variable Re-matching			Race Re-matching should be done with the pre-matched cohort	Race Re-matching should be done with the pre-matched cohort
* Day 0 EOI/REF dispensing exclusion were not created in input files, but instead achieved by PSA pre-processing.				
International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-9/10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) codes are provided by Optum360. National Drug Codes (NDC) are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."				

Appendix I. Specifications Defining Parameters for Baseline Covariate Groups in this Request

Covariate	Covariate Evaluation Window (days)
Demographic Characteristics	
Age (years, continuous)	Index date
Age-group	
18-44 years*	Index date
45-54 years*	Index date
55-64 years*	Index date
≥65 years*	Index date
Sex	
Male	Index date
Female	Index date
Race/ethnicity	
American Indian or Alaska Native	Index date
Asian	Index date
Black or African American	Index date
Native Hawaiian or Other Pacific Islander	Index date
White	Index date
Unknown	Index date
Year	
2015	Index date
2016	Index date
2017	Index date
2018	Index date
2019	Index date
2020	Index date
Combined Comorbidity Score	
Combined comorbidity score	-183 to 0
Health Conditions	
Angioedema	-183 to -1
Angioedema*	Ever to -1
Ambulatory allergies or allergy treatment*	-183 to -1
Serious allergies (inpatient hospital stays or emergency department visits)	-183 to -1
Ambulatory allergies or treatment and not serious allergies	-183 to -1
Diabetes	-183 to 0
Ischemic heart disease	-183 to 0
Renal disorders	-183 to 0
Medications	
Diuretics (thiazides, potassium sparing, loop diuretics)	-183 to 0
Nonsteroidal anti-inflammatory drugs (NSAIDs)	-183 to 0
Sirolimus	-183 to 0
Everolimus	-183 to 0

Appendix I. Specifications Defining Parameters for Baseline Covariate Groups in this Request

Covariate	Covariate Evaluation Window (days)
Health care utilization	
Number of inpatient hospital stays	-183 to 0
Number of emergency department visits	-183 to 0
Numer of institutional stay visits	-183 to 0
Number of ambulatory visits	-183 to 0
Number of other ambulatory visits	-183 to 0
Drug utilization	
Number of unique dispensings*	-183 to 0
Number of unique generics dispensed*	-183 to 0
Number of unique drug classes dispensed	-183 to 0

* Covariates followed by an asterisk (*) were not included in the adjusted Propensity Score (PS) model; only those covariates not followed by an asterisk (*) were included in the adjusted PS model.