

Disclaimer

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

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

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

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

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

Overview for Request: cder_mpl2p_wp032

Request ID: cder_mpl2p_wp032_nsdp_v01

Request Description: In this request, we assessed the risk of angioedema in patients diagnosed with heart failure associated with: 1) sacubitril/valsartan (SV) use comparing those with prior angiotensin-converting enzyme inhibitor (ACEI) use and those with prior angiotensin II receptor blockers (ARBs, not including SV) use; 2) SV use comparing those with and without prior ACEI use; and 3) SV use comparing those with and without prior ARB use. This request is a follow-up analysis to requests cder_mpl2r_wp016_nsdp_v01 and cder_mpl2p_wp021_nsdp_v01.

Sentinel Routine Querying Module: Type 2 Cohort Identification and Descriptive Analysis and Propensity Score (PS) Analysis modules, Query Request Package version 11.2.3, with ad hoc programming

Data Source: The query period spanned from July 7, 2015 through the end of Data Partner (DP)-specific data completeness at the time of execution of prior request, cder_mpl2p_wp021_nsdp_v01. We distributed the analytic package on January 18, 2022. This report contains aggregated data from five DPs which are a subset of the SDD. Data from Medicare patients having both fee-for-service medical coverage and Part D drug coverage are included. The propensity score estimation models converged across comparisons for all DPs. See Appendix A for the list of the query end dates specified for each DP in this query.

Study Design: We identified individuals with incident use of SV who were 18 years or older with a history of heart failure and evaluated occurrence of angioedema during the first qualifying (index) exposure episode. We then conducted pairwise, PS-matched comparisons between SV new users, SV new users with prior ACEI exposure, and SV new users with prior ARB exposure.

Exposure: We defined the exposure of interest using the National Drug Codes (NDCs) recorded in outpatient dispensing data. We defined new use using a 183-day washout period of no prior SV use. For a list of generic and brand names of medical products used to define the exposure drugs, please see Appendix B.

Outcomes of Interest: We defined our 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 outcomes using International Classification of Diseases, Ninth and Tenth Revisions, Clinical Modification (ICD-9-CM and ICD-10-CM). For a list of diagnosis codes used to define outcomes, please see Appendix C.

Cohort Eligibility Criteria: We required patients be enrolled in health plans with both medical and drug coverage for at least 183 days before index SV dispensing, during which gaps in coverage of up to 45 days were allowed. The following age groups were included in the cohort: 18-44, 45-54, 55-64 and 65+ years of age. We formed separate cohorts of SV new users, SV new users with ACEI use in the prior 183 days, SV new users with ARB use in the prior 183 days. We also performed sensitivity analyses for SV new users with ACEI use in the prior 14 days and SV new users with ARB use in the prior 14 days. For all SV new user cohorts, we required a diagnosis of heart failure in the 183 days prior to and including index date and no same-day dispensing of ACEI or ARB on the index date. We implemented additional exclusion criterion for each SV new user cohort: SV new users were required to have no ACEI or ARB use in the prior 183 days, SV new users with prior ACEI use were required to have no ARB use in the prior 183 days, and SV new users with prior ARB were required to have no ACEI use in the prior 183 days. Please see Appendix D for a list of generic and brand names of medical products to define inclusion/exclusion criteria in this request. Please see Appendix E for a list of ICD-9-CM and ICD-10-CM diagnosis codes used to define the heart failure inclusion condition for this request.

Follow-up: We determined follow-up time as-treated and based on the length of the exposure episode. We created exposure episodes using days supply recorded in the outpatient pharmacy dispensing data. We bridged together dispensings less than 14 days apart in covered days and added 14 days at the end of each exposure episode to create continuous treatment episodes. 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, including 365 days of continuous SV exposure, and initiation of ACEI or ARB; 3) disenrollment; 4) recorded death; 5) end of exposure episode; or 6) end of query period. Only the first valid exposure episode that occurred during the study period was included per patient.

Overview for Request: cder_mpl2p_wp032

Baseline Covariates: We summarized the following characteristics for individual SV new user cohorts: demographics as of the index date, including sex, race, Hispanic origin, age, and calendar year; pre-existing conditions or treatment use in the prior 183 days, including ambulatory allergies, ambulatory but not serious allergies, serious allergies, angioedema in the prior 183 days, angioedema throughout the past enrollment history; comorbidities or specific drug utilization in the prior 183 days or on the index date, including combined comorbidity score, diabetes, ischemic heart disease, renal disorders, diuretics, everolimus, nonsteroidal anti-inflammatory drugs, sirolimus; general health services and drug utilization in the prior 183 days or on the index date. Please refer to Appendices F, G, and I for a list of covariates, codes, and evaluation windows used to define covariates.

Propensity Score Estimation, Matching, and Analysis: For each comparison, we fit a logistic regression model for PS estimation based on potential confounders and risk factors outlined in Appendix I. The matching ratio was 1:1 and the matching caliper was 0.05. Exposure and comparator episodes were nearest neighbor-matched without replacement. For each comparison, we used a risk set-based approach to estimate the hazard ratio and 95% confidence intervals for the site-adjusted analyses, unconditional, and conditional matched analyses. We also estimated period-specific risks separately for 0-30, 31-60, 61-90, 91-180, 181-270, and 271-365 days. Subgroup analyses for effect estimation included angioedema diagnosis in 183 days prior to index date and race.

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 Sentinel Operations Center (info@sentinelsystem.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.sentinelsystem.org/projects/SENTINEL/repos/sentinel-routine-queryingtooldocumentation/browse>).

Table of Contents

<u>CIDA Glossary</u>	List of terms and their definitions found in this report pertaining to Sentinel's Cohort Identification and Descriptive Analysis (CIDA) Tool
<u>PSA Glossary</u>	List of terms and their definitions found in this report pertaining to Sentinel's Propensity Score Analysis (PSA) Tool
<u>Table 1a</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05
<u>Table 1b</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, in Risk Assessment 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
<u>Table 1c</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05
<u>Table 1d</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment 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
<u>Table 1e</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05
<u>Table 1f</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment 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
<u>Table 1g</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05
<u>Table 1h</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, in Risk Assessment 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
<u>Table 1i</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05
<u>Table 1j</u>	Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment 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

Table of Contents

- Table 1k** Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05
- Table 1l** Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment 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
- 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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window
- 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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, 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 Risk Window
- Table 4** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window
- Table 5** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window
- Table 6** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window
- Table 7** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window
- Table 8** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window
- Table 9** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window
- Table 10** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window
- Table 11** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Table of Contents

- Table 12** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, 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 Risk Window
- Table 13** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window
- Table 14** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window
- Table 15** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window
- Table 16** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window
- Table 17** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window
- Table 18** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window
- Table 19** Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window
- Figure 1a** Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 1b** Histogram of Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05 Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 2a** Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 2b** Histogram of Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

Table of Contents

- Figure 3a** Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 3b** Histogram for Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 4a** Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 4b** Histogram for Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 5a** Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 5b** Histogram for Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 6a** Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 6b** Histogram of Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 7a** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall
- Figure 7b** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 8a** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall

Table of Contents

- Figure 8b** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 9a** Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall
- Figure 9b** Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 10a** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall
- Figure 10b** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 11a** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall
- Figure 11b** Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Figure 12a** Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall
- Figure 12b** Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020
- Appendix A** Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (January 13, 2022)
- Appendix B** Generic and Brand Names of Medical Products Used to Define Exposures in this Request
- Appendix C** International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Outcomes in this Request
- Appendix D** Generic and Brand Names of Medical Products Used to Define Inclusion and Exclusion Criteria in this Request

Table of Contents

- | | |
|--------------------------|--|
| <u>Appendix E</u> | 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 |
| <u>Appendix F</u> | 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 |
| <u>Appendix G</u> | Generic and Brand Names of Medical Products Used to Define Covariates in this Request |
| <u>Appendix H</u> | Specifications Defining Parameters for this Request |
| <u>Appendix I</u> | Specifications Defining Baseline Characteristics and Propensity Score Analysis Covariates Evaluated in this Request |

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV		ARB-SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	68,868	100.0%	48,406	100.0%	-	-
Demographics		Standard		Standard		
Mean age (years)	70.2	11.2	72.6	10.7	-2.394	-0.218
Age						
18-44 years	2,374	3.4%	1,136	2.3%	1.100	0.066
45-54 years	5,060	7.3%	2,588	5.3%	2.001	0.082
55-64 years	11,290	16.4%	5,863	12.1%	4.282	0.123
65+ years	50,144	72.8%	38,819	80.2%	-7.383	-0.175
Sex						
Female	20,972	30.5%	18,939	39.1%	-8.673	-0.183
Male	47,896	69.5%	29,467	60.9%	8.673	0.183
Race						
American Indian or Alaska Native	237	0.3%	129	0.3%	0.078	0.014
Asian	662	1.0%	1,053	2.2%	-1.214	-0.098
Black or African American	8,897	12.9%	6,877	14.2%	-1.288	-0.038
Native Hawaiian or Other Pacific Islander	66	0.1%	59	0.1%	-0.026	-0.008
Unknown	11,340	16.5%	7,857	16.2%	0.235	0.006
White	47,666	69.2%	32,431	67.0%	2.216	0.048
Hispanic Origin	1,336	1.9%	1,123	2.3%	-0.380	-0.026
Year						
2015	1,336	1.9%	862	1.8%	0.159	0.012
2016	10,422	15.1%	6,619	13.7%	1.459	0.042
2017	16,688	24.2%	10,924	22.6%	1.664	0.039
2018	18,864	27.4%	13,385	27.7%	-0.260	-0.006
2019	21,239	30.8%	16,324	33.7%	-2.883	-0.062
2020	319	3.6%	292	4.9%	-1.349	-0.067
Recorded History of:		Standard		Standard		
Charlson/Elixhauser Combined Comorbidity Score ³	Mean	Deviation	Mean	Deviation		
Ambulatory allergies or allergy treatment	33,387	48.5%	25,738	53.2%	-4.691	-0.094
Ambulatory allergies or treatment and not serious	28,086	40.8%	21,351	44.1%	-3.326	-0.067
Angioedema (-183, -1)	83	0.1%	56	0.1%	0.005	0.001
Angioedema (ever, -1)	492	0.7%	740	1.5%	-0.814	-0.077
Diabetes	34,675	50.3%	25,720	53.1%	-2.784	-0.056
Ischemic heart disease	54,489	79.1%	37,775	78.0%	1.083	0.026
Renal disorders	27,082	39.3%	20,921	43.2%	-3.895	-0.079
Serious allergies	8,036	11.7%	6,440	13.3%	-1.635	-0.049

Table 1a. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV		ARB-SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	59,667	86.6%	42,247	87.3%	-0.637	-0.019
Everolimus	11	0.0%	16	0.0%	-0.017	-0.011
Nonsteroidal anti-inflammatory drugs (NSAIDs)	7,692	11.2%	5,540	11.4%	-0.276	-0.009
Sirolimus	*****	*****	*****	*****	-0.001	-0.001
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	17.8	13.7	19.2	14.8	-1.364	-0.096
Mean number of emergency room encounters	0.8	1.6	0.7	1.5	0.067	0.043
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	0.028	0.026
Mean number of non-acute institutional encounters	0.1	0.5	0.1	0.5	0.006	0.012
Mean number of other ambulatory encounters	8.2	12.5	8.1	11.9	0.071	0.006
<i>Mean number of filled prescriptions</i>	<i>31.2</i>	<i>19.6</i>	<i>32.3</i>	<i>20.8</i>	<i>-1.135</i>	<i>-0.056</i>
<i>Mean number of generics</i>	<i>13.1</i>	<i>5.1</i>	<i>13.8</i>	<i>5.4</i>	<i>-0.692</i>	<i>-0.131</i>
<i>Mean number of unique drug classes</i>	<i>11.4</i>	<i>4.5</i>	<i>12.0</i>	<i>4.7</i>	<i>-0.602</i>	<i>-0.131</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)

*****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. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, in Risk Assessment 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	
	ACEI-SV		ARB-SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	46,333	67.3%	46,333	95.7%	-	-
Demographics		Standard		Standard		
Mean age (years)	72.2	10.6	72.2	10.7	-0.039	-0.004
Age						
18-44 years	1,009	2.2%	1,132	2.4%	-0.265	-0.018
45-54 years	2,418	5.2%	2,572	5.6%	-0.332	-0.015
55-64 years	6,571	14.2%	5,796	12.5%	1.673	0.051
65+ years	36,335	78.4%	36,833	79.5%	-1.075	-0.028
Sex						
Female	17,309	37.4%	17,308	37.4%	0.002	0.000
Male	29,024	62.6%	29,025	62.6%	-0.002	-0.000
Race						
American Indian or Alaska Native	138	0.3%	127	0.3%	0.024	0.004
Asian	633	1.4%	580	1.3%	0.114	0.010
Black or African American	6,363	13.7%	6,436	13.9%	-0.158	-0.005
Native Hawaiian or Other Pacific Islander	59	0.1%	56	0.1%	0.006	0.002
Unknown	7,557	16.3%	7,528	16.2%	0.063	0.003
White	31,583	68.2%	31,606	68.2%	-0.050	-0.001
Hispanic Origin	1,039	2.2%	986	2.1%	0.114	0.008
Year						
2015	846	1.8%	834	1.8%	0.026	0.002
2016	6,449	13.9%	6,469	14.0%	-0.043	-0.001
2017	10,566	22.8%	10,564	22.8%	0.004	0.000
2018	12,782	27.6%	12,823	27.7%	-0.088	-0.002
2019	15,424	33.3%	15,370	33.2%	0.117	0.002
2020	266	4.6%	273	4.7%	-0.120	-0.006
Recorded History of:		Standard		Standard		
Charlson/Elixhauser Combined Comorbidity Score ³	5.4	2.7	5.4	2.7	0.010	0.004
Ambulatory allergies or allergy treatment	24,258	52.4%	24,213	52.3%	0.097	0.002
Ambulatory allergies or treatment and not serious	20,229	43.7%	20,146	43.5%	0.179	0.004
Angioedema (-183, -1)	55	0.1%	52	0.1%	0.006	0.002
Angioedema (ever, -1)	340	0.7%	699	1.5%	-0.775	-0.074
Diabetes	24,321	52.5%	24,306	52.5%	0.032	0.001
Ischemic heart disease	36,287	78.3%	36,318	78.4%	-0.067	-0.002
Renal disorders	19,739	42.6%	19,680	42.5%	0.127	0.003
Serious allergies	6,013	13.0%	6,029	13.0%	-0.035	-0.001

Table 1b. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, in Risk Assessment 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	
	ACEI-SV		ARB-SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	40,368	87.1%	40,436	87.3%	-0.147	-0.004
Everolimus	11	0.0%	12	0.0%	-0.002	-0.001
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,241	11.3%	5,186	11.2%	0.119	0.004
Sirolimus	*****	*****	*****	*****	0.002	0.002
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	18.9	14.6	18.8	14.1	0.047	0.003
Mean number of emergency room encounters	0.7	1.4	0.7	1.5	0.011	0.007
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	0.004	0.004
Mean number of non-acute institutional encounters	0.1	0.5	0.1	0.5	0.000	0.001
Mean number of other ambulatory encounters	8.1	11.8	8.1	12.0	0.037	0.003
<i>Mean number of filled prescriptions</i>	32.4	20.2	31.7	20.0	0.689	0.034
<i>Mean number of generics</i>	13.6	5.2	13.6	5.2	-0.011	-0.002
<i>Mean number of unique drug classes</i>	11.8	4.6	11.8	4.6	0.023	0.005

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

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	68,829	100.0%	43,140	100.0%	-	-
Demographics					Standard Deviation	Standard Deviation
Mean age (years)	70.2	11.2	71.6	11.9	-1.410	-0.122
Age						
18-44 years	2,373	3.4%	1,606	3.7%	-0.275	-0.015
45-54 years	5,058	7.3%	2,977	6.9%	0.448	0.017
55-64 years	11,281	16.4%	5,949	13.8%	2.600	0.073
65+ years	50,117	72.8%	32,608	75.6%	-2.773	-0.063
Sex						
Female	20,959	30.5%	15,442	35.8%	-5.344	-0.114
Male	47,870	69.5%	27,698	64.2%	5.344	0.114
Race						
American Indian or Alaska Native	237	0.3%	139	0.3%	0.022	0.004
Asian	664	1.0%	531	1.2%	-0.266	-0.026
Black or African American	8,906	12.9%	5,806	13.5%	-0.519	-0.015
Native Hawaiian or Other Pacific Islander	66	0.1%	46	0.1%	-0.011	-0.003
Unknown	11,333	16.5%	7,114	16.5%	-0.025	-0.001
White	47,623	69.2%	29,504	68.4%	0.799	0.017
Hispanic Origin	1,335	1.9%	738	1.7%	0.229	0.017
Year						
2015	1,336	1.9%	429	1.0%	0.947	0.079
2016	10,421	15.1%	4,174	9.7%	5.465	0.166
2017	16,686	24.2%	9,113	21.1%	3.118	0.075
2018	18,848	27.4%	12,227	28.3%	-0.959	-0.021
2019	21,219	30.8%	16,854	39.1%	-8.240	-0.173
2020	319	3.6%	343	5.9%	-2.310	-0.109
Recorded History of:					Standard Deviation	Standard Deviation
Charlson/Elixhauser Combined Comorbidity Score ³	5.2	2.7	5.6	2.8	-0.390	-0.142
Ambulatory allergies or allergy treatment	33,365	48.5%	21,201	49.1%	-0.669	-0.013
Ambulatory allergies or treatment and not serious	28,067	40.8%	17,374	40.3%	0.504	0.010
Angioedema (-183, -1)	83	0.1%	59	0.1%	-0.016	-0.005
Angioedema (ever, -1)	493	0.7%	612	1.4%	-0.702	-0.068
Diabetes	34,669	50.4%	20,080	46.5%	3.824	0.077
Ischemic heart disease	54,462	79.1%	32,685	75.8%	3.362	0.080
Renal disorders	27,064	39.3%	19,253	44.6%	-5.308	-0.108
Serious allergies	8,028	11.7%	6,019	14.0%	-2.289	-0.069

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

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	59,637	86.6%	34,664	80.4%	6.293	0.170
Everolimus	11	0.0%	12	0.0%	-0.012	-0.008
Nonsteroidal anti-inflammatory drugs (NSAIDs)	7,692	11.2%	4,364	10.1%	1.060	0.034
Sirolimus	*****	*****	*****	*****	-0.012	-0.009
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	17.8	13.7	18.3	17.3	-0.529	-0.034
Mean number of emergency room encounters	0.8	1.6	0.8	1.6	0.001	0.001
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	-0.018	-0.016
Mean number of non-acute institutional encounters	0.1	0.5	0.2	0.6	-0.058	-0.104
Mean number of other ambulatory encounters	8.2	12.5	9.5	14.5	-1.280	-0.095
<i>Mean number of filled prescriptions</i>	<i>31.2</i>	<i>19.7</i>	<i>26.7</i>	<i>20.7</i>	<i>4.477</i>	<i>0.222</i>
<i>Mean number of generics</i>	<i>13.1</i>	<i>5.1</i>	<i>11.7</i>	<i>5.5</i>	<i>1.453</i>	<i>0.273</i>
Mean number of unique drug classes	11.4	4.5	11.0	4.9	0.386	0.082

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 1d. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment 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	
	ACEI-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	41,518	60.3%	41,518	96.2%	-	-
Demographics					Standard	Standard
Mean age (years)	71.6	10.9	71.5	11.8	0.039	0.003
Age					Standard	Standard
18-44 years	1,179	2.8%	1,521	3.7%	-0.824	-0.047
45-54 years	2,555	6.2%	2,868	6.9%	-0.754	-0.031
55-64 years	6,074	14.6%	5,737	13.8%	0.812	0.024
65+ years	31,710	76.4%	31,392	75.6%	0.766	0.019
Sex					Standard	Standard
Female	14,510	34.9%	14,518	35.0%	-0.019	-0.000
Male	27,008	65.1%	27,000	65.0%	0.019	0.000
Race					Standard	Standard
American Indian or Alaska Native	128	0.3%	132	0.3%	-0.010	-0.002
Asian	475	1.1%	482	1.2%	-0.017	-0.002
Black or African American	5,622	13.5%	5,550	13.4%	0.173	0.005
Native Hawaiian or Other Pacific Islander	37	0.1%	40	0.1%	-0.007	-0.002
Unknown	6,641	16.0%	6,668	16.1%	-0.065	-0.003
White	28,615	68.9%	28,646	69.0%	-0.075	-0.002
Hispanic Origin					Standard	Standard
Year					Standard	Standard
2015	438	1.1%	428	1.0%	0.024	0.002
2016	4,083	9.8%	4,161	10.0%	-0.188	-0.006
2017	8,941	21.5%	9,013	21.7%	-0.173	-0.004
2018	11,903	28.7%	11,895	28.7%	0.019	0.000
2019	15,877	38.2%	15,743	37.9%	0.323	0.007
2020	276	5.0%	278	5.1%	-0.036	-0.002
Recorded History of:					Standard	Standard
Charlson/Elixhauser Combined Comorbidity Score ³	5.6	2.8	5.6	2.8	-0.005	-0.002
Ambulatory allergies or allergy treatment	20,406	49.1%	20,374	49.1%	0.077	0.002
Ambulatory allergies or treatment and not serious	16,688	40.2%	16,772	40.4%	-0.202	-0.004
Angioedema (-183, -1)	47	0.1%	55	0.1%	-0.019	-0.006
Angioedema (ever, -1)	299	0.7%	592	1.4%	-0.706	-0.069
Diabetes	19,584	47.2%	19,531	47.0%	0.128	0.003
Ischemic heart disease	31,745	76.5%	31,755	76.5%	-0.024	-0.001
Renal disorders	18,301	44.1%	18,268	44.0%	0.079	0.002
Serious allergies	5,707	13.7%	5,659	13.6%	0.116	0.003

Table 1d. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment 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	
	ACEI-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	34,073	82.1%	34,101	82.1%	-0.067	-0.002
Everolimus	*****	*****	*****	*****	-0.002	-0.002
Nonsteroidal anti-inflammatory drugs (NSAIDs)	4,302	10.4%	4,273	10.3%	0.070	0.002
Sirolimus	*****	*****	*****	*****	-0.010	-0.009
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	18.1	14.4	18.1	16.8	-0.035	-0.002
Mean number of emergency room encounters	0.8	1.6	0.8	1.6	0.009	0.006
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	0.000	0.000
Mean number of non-acute institutional encounters	0.2	0.6	0.2	0.6	-0.003	-0.005
Mean number of other ambulatory encounters	9.1	13.9	9.1	13.7	-0.041	-0.003
<i>Mean number of filled prescriptions</i>	<i>30.1</i>	<i>19.5</i>	<i>27.0</i>	<i>20.7</i>	<i>3.133</i>	<i>0.156</i>
<i>Mean number of generics</i>	<i>12.8</i>	<i>5.1</i>	<i>11.8</i>	<i>5.5</i>	<i>1.044</i>	<i>0.197</i>
Mean number of unique drug classes	11.1	4.5	11.1	4.9	0.019	0.004

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 1e. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ARB-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	48,455	100.0%	43,845	100.0%	-	-
Demographics						
Mean age (years)	72.6	10.7	71.5	11.9	1.087	0.096
Age						
18-44 years	1,136	2.3%	1,651	3.8%	-1.421	-0.083
45-54 years	2,592	5.3%	3,090	7.0%	-1.698	-0.070
55-64 years	5,868	12.1%	6,116	13.9%	-1.839	-0.055
65+ years	38,859	80.2%	32,988	75.2%	4.958	0.119
Sex						
Female	18,947	39.1%	15,531	35.4%	3.680	0.076
Male	29,508	60.9%	28,314	64.6%	-3.680	-0.076
Race						
American Indian or Alaska Native	128	0.3%	144	0.3%	-0.064	-0.012
Asian	1,055	2.2%	525	1.2%	0.980	0.076
Black or African American	6,881	14.2%	5,888	13.4%	0.772	0.022
Native Hawaiian or Other Pacific Islander	59	0.1%	44	0.1%	0.021	0.006
Unknown	7,859	16.2%	7,214	16.5%	-0.234	-0.006
White	32,473	67.0%	30,030	68.5%	-1.474	-0.032
Hispanic Origin	1,128	2.3%	752	1.7%	0.613	0.044
Year						
2015	862	1.8%	429	1.0%	0.801	0.069
2016	6,622	13.7%	4,189	9.6%	4.112	0.129
2017	10,933	22.6%	9,229	21.0%	1.514	0.037
2018	13,394	27.6%	12,481	28.5%	-0.824	-0.018
2019	16,351	33.7%	17,169	39.2%	-5.414	-0.113
2020	293	4.9%	348	5.9%	-0.959	-0.042
Recorded History of:						
Charlson/Elixhauser Combined Comorbidity Score ³	Mean	Standard Deviation	Mean	Standard Deviation		
Ambulatory allergies or allergy treatment	25,740	53.1%	21,467	49.0%	4.160	0.083
Ambulatory allergies or treatment and not serious	21,353	44.1%	17,616	40.2%	3.890	0.079
Angioedema (-183, -1)	56	0.1%	59	0.1%	-0.019	-0.005
Angioedema (ever, -1)	738	1.5%	596	1.4%	0.164	0.014
Diabetes	25,762	53.2%	20,413	46.6%	6.610	0.132
Ischemic heart disease	37,818	78.0%	33,251	75.8%	2.210	0.052
Renal disorders	20,953	43.2%	19,524	44.5%	-1.287	-0.026
Serious allergies	6,441	13.3%	6,051	13.8%	-0.508	-0.015

Table 1e. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ARB-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,295	87.3%	35,247	80.4%	6.897	0.188
Everolimus	16	0.0%	12	0.0%	0.006	0.003
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,551	11.5%	4,401	10.0%	1.418	0.046
Sirolimus	*****	*****	*****	*****	-0.010	-0.008
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	19.2	14.8	18.3	17.3	0.904	0.056
Mean number of emergency room encounters	0.7	1.5	0.8	1.6	-0.062	-0.041
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	-0.042	-0.039
Mean number of non-acute institutional encounters	0.1	0.5	0.2	0.6	-0.062	-0.115
Mean number of other ambulatory encounters	8.1	11.9	9.4	14.5	-1.305	-0.099
<i>Mean number of filled prescriptions</i>	<i>32.4</i>	<i>20.8</i>	<i>26.7</i>	<i>20.7</i>	<i>5.643</i>	<i>0.272</i>
<i>Mean number of generics</i>	<i>13.8</i>	<i>5.4</i>	<i>11.7</i>	<i>5.5</i>	<i>2.162</i>	<i>0.397</i>
<i>Mean number of unique drug classes</i>	<i>12.0</i>	<i>4.7</i>	<i>11.0</i>	<i>4.9</i>	<i>1.005</i>	<i>0.209</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)

*****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 1f. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment 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	
	ARB-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	37,893	78.2%	37,893	86.4%	-	-
Demographics					Standard	Standard
Mean age (years)	72.2	10.9	72.3	11.5	-0.033	-0.003
Age					Standard	Standard
18-44 years	1,030	2.7%	1,096	2.9%	-0.174	-0.011
45-54 years	2,155	5.7%	2,436	6.4%	-0.742	-0.032
55-64 years	4,701	12.4%	5,046	13.3%	-0.910	-0.028
65+ years	30,007	79.2%	29,315	77.4%	1.826	0.048
Sex					Standard	Standard
Female	14,044	37.1%	13,990	36.9%	0.143	0.003
Male	23,849	62.9%	23,903	63.1%	-0.143	-0.003
Race					Standard	Standard
American Indian or Alaska Native	113	0.3%	108	0.3%	0.013	0.002
Asian	546	1.4%	507	1.3%	0.103	0.009
Black or African American	5,167	13.6%	5,203	13.7%	-0.095	-0.003
Native Hawaiian or Other Pacific Islander	40	0.1%	41	0.1%	-0.003	-0.001
Unknown	5,825	15.4%	5,845	15.4%	-0.053	-0.002
White	26,202	69.1%	26,189	69.1%	0.034	0.001
Hispanic Origin	693	1.8%	691	1.8%	0.005	0.000
Year					Standard	Standard
2015	477	1.3%	418	1.1%	0.156	0.014
2016	4,141	10.9%	4,055	10.7%	0.227	0.007
2017	8,295	21.9%	8,331	22.0%	-0.095	-0.002
2018	10,863	28.7%	10,851	28.6%	0.032	0.001
2019	13,870	36.6%	13,991	36.9%	-0.319	-0.007
2020	247	5.2%	247	5.2%	0.000	0.000
Recorded History of:					Standard	Standard
Charlson/Elixhauser Combined Comorbidity Score ³	5.5	2.7	5.5	2.7	0.009	0.003
Ambulatory allergies or allergy treatment	19,321	51.0%	19,223	50.7%	0.259	0.005
Ambulatory allergies or treatment and not serious	15,898	42.0%	15,890	41.9%	0.021	0.000
Angioedema (-183, -1)	46	0.1%	49	0.1%	-0.008	-0.002
Angioedema (ever, -1)	568	1.5%	535	1.4%	0.087	0.007
Diabetes	18,672	49.3%	18,546	48.9%	0.333	0.007
Ischemic heart disease	29,198	77.1%	29,183	77.0%	0.040	0.001
Renal disorders	16,721	44.1%	16,722	44.1%	-0.003	-0.000
Serious allergies	5,146	13.6%	5,148	13.6%	-0.005	-0.000

Table 1f. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, in Risk Assessment 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	
	ARB-SV		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	32,102	84.7%	32,308	85.3%	-0.544	-0.015
Everolimus	12	0.0%	11	0.0%	0.003	0.002
Nonsteroidal anti-inflammatory drugs (NSAIDs)	4,032	10.6%	4,000	10.6%	0.084	0.003
Sirolimus	*****	*****	*****	*****	-0.003	-0.002
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	18.7	14.8	18.7	17.3	0.075	0.005
Mean number of emergency room encounters	0.7	1.6	0.7	1.4	-0.000	-0.000
Mean number of inpatient hospital encounters	0.8	1.1	0.8	1.1	0.000	0.000
Mean number of non-acute institutional encounters	0.1	0.5	0.1	0.5	0.002	0.004
Mean number of other ambulatory encounters	8.5	12.7	8.5	12.4	-0.027	-0.002
<i>Mean number of filled prescriptions</i>	<i>30.6</i>	<i>19.7</i>	<i>28.1</i>	<i>20.8</i>	<i>2.476</i>	<i>0.122</i>
<i>Mean number of generics</i>	<i>13.2</i>	<i>5.2</i>	<i>12.1</i>	<i>5.4</i>	<i>1.085</i>	<i>0.205</i>
Mean number of unique drug classes	11.5	4.5	11.5	4.9	0.020	0.004

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. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV 14-day		ARB-SV 14-day		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	48,920	100.0%	35,084	100.0%	-	-
Demographics		Standard		Standard		
Mean age (years)	70.5	11.1	72.8	10.6	-2.333	-0.216
Age						
18-44 years	1,558	3.2%	752	2.1%	1.041	0.065
45-54 years	3,372	6.9%	1,738	5.0%	1.939	0.082
55-64 years	7,879	16.1%	4,166	11.9%	4.232	0.122
65+ years	36,111	73.8%	28,428	81.0%	-7.212	-0.173
Sex						
Female	14,680	30.0%	13,653	38.9%	-8.907	-0.188
Male	34,240	70.0%	21,431	61.1%	8.907	0.188
Race						
American Indian or Alaska Native	160	0.3%	82	0.2%	0.093	0.018
Asian	525	1.1%	847	2.4%	-1.341	-0.103
Black or African American	5,967	12.2%	4,736	13.5%	-1.302	-0.039
Native Hawaiian or Other Pacific Islander	46	0.1%	45	0.1%	-0.034	-0.010
Unknown	7,922	16.2%	5,604	16.0%	0.221	0.006
White	34,300	70.1%	23,770	67.8%	2.363	0.051
Hispanic Origin	973	2.0%	877	2.5%	-0.511	-0.034
Year						
2015	940	1.9%	599	1.7%	0.214	0.016
2016	6,778	13.9%	4,410	12.6%	1.285	0.038
2017	11,541	23.6%	7,696	21.9%	1.656	0.039
2018	13,743	28.1%	9,952	28.4%	-0.273	-0.006
2019	15,681	32.1%	12,211	34.8%	-2.751	-0.058
2020	237	3.9%	216	5.3%	-1.410	-0.068
Recorded History of:		Standard		Standard		
Charlson/Elixhauser Combined Comorbidity Score ³	Mean	Deviation	Mean	Deviation		
Ambulatory allergies or allergy treatment	23,587	48.2%	18,832	53.7%	-5.461	-0.109
Ambulatory allergies or treatment and not serious	20,036	41.0%	15,807	45.1%	-4.098	-0.083
Angioedema (-183, -1)	46	0.1%	33	0.1%	-0.000	-0.000
Angioedema (ever, -1)	330	0.7%	533	1.5%	-0.845	-0.081
Diabetes	24,497	50.1%	18,695	53.3%	-3.211	-0.064
Ischemic heart disease	38,607	78.9%	27,363	78.0%	0.926	0.023
Renal disorders	18,569	38.0%	14,710	41.9%	-3.970	-0.081
Serious allergies	5,343	10.9%	4,442	12.7%	-1.739	-0.054

Table 1g. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV 14-day		ARB-SV 14-day		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,268	86.4%	30,596	87.2%	-0.806	-0.024
Everolimus	11	0.0%	11	0.0%	-0.009	-0.005
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,583	11.4%	4,097	11.7%	-0.265	-0.008
Sirolimus	*****	*****	*****	*****	-0.002	-0.002
Health Service Utilization Intensity:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean number of ambulatory encounters	17.5	13.4	19.0	14.7	-1.493	-0.106
Mean number of emergency room encounters	0.7	1.4	0.7	1.5	0.047	0.032
Mean number of inpatient hospital encounters	0.7	1.0	0.7	1.0	0.010	0.009
Mean number of non-acute institutional encounters	0.1	0.4	0.1	0.4	0.000	0.000
Mean number of other ambulatory encounters	7.3	10.9	7.4	10.6	-0.130	-0.012
Mean number of filled prescriptions	31.7	20.1	33.2	21.6	-1.460	-0.070
Mean number of generics	13.2	5.1	14.0	5.4	-0.786	-0.150
Mean number of unique drug classes	11.4	4.5	12.1	4.7	-0.678	-0.147

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. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, in Risk Assessment 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	
	ACEI-SV 14-day		ARB-SV 14-day		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	33,383	68.2%	33,383	95.2%	-	-
Demographics		Standard		Standard		
Mean age (years)	72.4	10.4	72.4	10.5	-0.044	-0.004
Age						
18-44 years	623	1.9%	749	2.2%	-0.377	-0.027
45-54 years	1,679	5.0%	1,723	5.2%	-0.132	-0.006
55-64 years	4,704	14.1%	4,099	12.3%	1.812	0.055
65+ years	26,377	79.0%	26,812	80.3%	-1.303	-0.035
Sex						
Female	12,303	36.9%	12,323	36.9%	-0.060	-0.001
Male	21,080	63.1%	21,060	63.1%	0.060	0.001
Race						
American Indian or Alaska Native	85	0.3%	82	0.2%	0.009	0.002
Asian	493	1.5%	471	1.4%	0.066	0.006
Black or African American	4,389	13.1%	4,387	13.1%	0.006	0.000
Native Hawaiian or Other Pacific Islander	37	0.1%	42	0.1%	-0.015	-0.004
Unknown	5,331	16.0%	5,327	16.0%	0.012	0.001
White	23,048	69.0%	23,074	69.1%	-0.078	-0.002
Hispanic Origin	766	2.3%	762	2.3%	0.012	0.001
Year						
2015	576	1.7%	583	1.7%	-0.021	-0.002
2016	4,297	12.9%	4,264	12.8%	0.099	0.003
2017	7,421	22.2%	7,401	22.2%	0.060	0.001
2018	9,432	28.3%	9,499	28.5%	-0.201	-0.004
2019	11,463	34.3%	11,436	34.3%	0.081	0.002
2020	194	4.8%	200	5.0%	-0.150	-0.007
Recorded History of:		Standard		Standard		
Charlson/Elixhauser Combined Comorbidity Score ³	5.2	2.6	5.3	2.6	-0.009	-0.003
Ambulatory allergies or allergy treatment	17,551	52.6%	17,515	52.5%	0.108	0.002
Ambulatory allergies or treatment and not serious	14,788	44.3%	14,746	44.2%	0.126	0.003
Angioedema (-183, -1)	25	0.1%	28	0.1%	-0.009	-0.003
Angioedema (ever, -1)	234	0.7%	495	1.5%	-0.782	-0.075
Diabetes	17,520	52.5%	17,515	52.5%	0.015	0.000
Ischemic heart disease	26,098	78.2%	26,160	78.4%	-0.186	-0.005
Renal disorders	13,710	41.1%	13,718	41.1%	-0.024	-0.000
Serious allergies	4,100	12.3%	4,089	12.2%	0.033	0.001

Table 1h. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, in Risk Assessment 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	
	ACEI-SV 14-day		ARB-SV 14-day		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	29,121	87.2%	29,096	87.2%	0.075	0.002
Everolimus	*****	*****	*****	*****	0.003	0.002
Nonsteroidal anti-inflammatory drugs (NSAIDs)	3,825	11.5%	3,799	11.4%	0.078	0.002
Sirolimus	*****	*****	*****	*****	-0.006	-0.006
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	18.6	14.4	18.6	13.9	0.013	0.001
Mean number of emergency room encounters	0.7	1.3	0.7	1.5	0.002	0.002
Mean number of inpatient hospital encounters	0.7	1.0	0.7	1.0	-0.001	-0.001
Mean number of non-acute institutional encounters	0.1	0.4	0.1	0.4	-0.001	-0.003
Mean number of other ambulatory encounters	7.4	10.6	7.4	10.7	-0.006	-0.001
<i>Mean number of filled prescriptions</i>	<i>33.0</i>	<i>20.9</i>	<i>32.3</i>	<i>20.5</i>	<i>0.665</i>	<i>0.032</i>
<i>Mean number of generics</i>	<i>13.7</i>	<i>5.2</i>	<i>13.7</i>	<i>5.2</i>	<i>-0.037</i>	<i>-0.007</i>
<i>Mean number of unique drug classes</i>	<i>11.9</i>	<i>4.6</i>	<i>11.9</i>	<i>4.6</i>	<i>0.010</i>	<i>0.002</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)

*****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. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	48,892	100.0%	44,050	100.0%	-	-
Demographics						
Mean age (years)	70.5	11.1	71.6	11.9	-1.089	-0.095
Age						
18-44 years	1,556	3.2%	1,658	3.8%	-0.581	-0.032
45-54 years	3,372	6.9%	3,056	6.9%	-0.041	-0.002
55-64 years	7,872	16.1%	6,127	13.9%	2.192	0.061
65+ years	36,092	73.8%	33,209	75.4%	-1.569	-0.036
Sex						
Female	14,668	30.0%	15,715	35.7%	-5.675	-0.121
Male	34,224	70.0%	28,335	64.3%	5.675	0.121
Race						
American Indian or Alaska Native	160	0.3%	143	0.3%	0.003	0.000
Asian	525	1.1%	537	1.2%	-0.145	-0.014
Black or African American	5,969	12.2%	5,968	13.5%	-1.340	-0.040
Native Hawaiian or Other Pacific Islander	46	0.1%	47	0.1%	-0.013	-0.004
Unknown	7,919	16.2%	7,229	16.4%	-0.214	-0.006
White	34,273	70.1%	30,126	68.4%	1.709	0.037
Hispanic Origin	972	2.0%	758	1.7%	0.267	0.020
Year						
2015	940	1.9%	429	1.0%	0.949	0.079
2016	6,778	13.9%	4,188	9.5%	4.356	0.136
2017	11,538	23.6%	9,252	21.0%	2.596	0.062
2018	13,734	28.1%	12,543	28.5%	-0.384	-0.009
2019	15,665	32.0%	17,289	39.2%	-7.209	-0.151
2020	237	3.9%	349	5.9%	-2.015	-0.094
Recorded History of:						
Charlson/Elixhauser Combined Comorbidity Score ³	5.1	2.6	5.6	2.8	-0.507	-0.188
Ambulatory allergies or allergy treatment	23,570	48.2%	21,612	49.1%	-0.854	-0.017
Ambulatory allergies or treatment and not serious	20,017	40.9%	17,732	40.3%	0.687	0.014
Angioedema (-183, -1)	46	0.1%	60	0.1%	-0.042	-0.012
Angioedema (ever, -1)	331	0.7%	621	1.4%	-0.733	-0.072
Diabetes	24,495	50.1%	20,551	46.7%	3.446	0.069
Ischemic heart disease	38,588	78.9%	33,377	75.8%	3.154	0.075
Renal disorders	18,565	38.0%	19,642	44.6%	-6.619	-0.135
Serious allergies	5,343	10.9%	6,110	13.9%	-2.942	-0.089

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

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ACEI-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	42,243	86.4%	35,414	80.4%	6.006	0.162
Everolimus	11	0.0%	12	0.0%	-0.005	-0.003
Nonsteroidal anti-inflammatory drugs (NSAIDs)	5,584	11.4%	4,435	10.1%	1.353	0.044
Sirolimus	*****	*****	*****	*****	-0.010	-0.008
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	17.5	13.4	18.3	17.3	-0.805	-0.052
Mean number of emergency room encounters	0.7	1.4	0.8	1.6	-0.053	-0.036
Mean number of inpatient hospital encounters	0.7	1.0	0.8	1.1	-0.083	-0.078
Mean number of non-acute institutional encounters	0.1	0.4	0.2	0.6	-0.094	-0.184
Mean number of other ambulatory encounters	7.3	10.9	9.4	14.5	-2.116	-0.165
<i>Mean number of filled prescriptions</i>	<i>31.7</i>	<i>20.1</i>	<i>26.7</i>	<i>20.7</i>	<i>5.044</i>	<i>0.247</i>
<i>Mean number of generics</i>	<i>13.2</i>	<i>5.1</i>	<i>11.7</i>	<i>5.5</i>	<i>1.520</i>	<i>0.287</i>
Mean number of unique drug classes	11.4	4.5	11.0	4.9	0.393	0.084

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 1j. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment 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	
	ACEI-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	38,268	78.3%	38,268	86.9%	-	-
Demographics					Standard	Standard
	Mean	Deviation	Mean	Deviation		
Mean age (years)	71.3	10.9	71.3	11.8	-0.010	-0.001
Age						
18-44 years	1,127	2.9%	1,424	3.7%	-0.776	-0.044
45-54 years	2,354	6.2%	2,697	7.0%	-0.896	-0.037
55-64 years	5,729	15.0%	5,416	14.2%	0.818	0.024
65+ years	29,058	75.9%	28,731	75.1%	0.854	0.021
Sex						
Female	12,707	33.2%	12,712	33.2%	-0.013	-0.000
Male	25,561	66.8%	25,556	66.8%	0.013	0.000
Race						
American Indian or Alaska Native	111	0.3%	115	0.3%	-0.010	-0.002
Asian	442	1.2%	453	1.2%	-0.029	-0.003
Black or African American	4,995	13.1%	4,986	13.0%	0.024	0.001
Native Hawaiian or Other Pacific Islander	42	0.1%	40	0.1%	0.005	0.002
Unknown	6,073	15.9%	6,076	15.9%	-0.008	-0.000
White	26,605	69.5%	26,598	69.5%	0.018	0.000
Hispanic Origin						
	Mean	Deviation	Mean	Deviation		
Year						
2015	424	1.1%	424	1.1%	0.000	0.000
2016	4,000	10.5%	4,026	10.5%	-0.068	-0.002
2017	8,549	22.3%	8,525	22.3%	0.063	0.002
2018	11,112	29.0%	11,080	29.0%	0.084	0.002
2019	13,955	36.5%	13,978	36.5%	-0.060	-0.001
2020	228	4.6%	235	4.8%	-0.143	-0.007
Recorded History of:					Standard	Standard
	Mean	Deviation	Mean	Deviation		
Charlson/Elixhauser Combined Comorbidity Score ³	5.3	2.7	5.4	2.6	-0.013	-0.005
Ambulatory allergies or allergy treatment	18,802	49.1%	18,681	48.8%	0.316	0.006
Ambulatory allergies or treatment and not serious	15,710	41.1%	15,635	40.9%	0.196	0.004
Angioedema (-183, -1)	42	0.1%	44	0.1%	-0.005	-0.002
Angioedema (ever, -1)	274	0.7%	528	1.4%	-0.664	-0.065
Diabetes	18,299	47.8%	18,298	47.8%	0.003	0.000
Ischemic heart disease	29,508	77.1%	29,592	77.3%	-0.220	-0.005
Renal disorders	16,040	41.9%	15,968	41.7%	0.188	0.004
Serious allergies	4,716	12.3%	4,692	12.3%	0.063	0.002

Table 1j. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment 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	
	ACEI-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	32,038	83.7%	32,112	83.9%	-0.193	-0.005
Everolimus	*****	*****	*****	*****	-0.010	-0.007
Nonsteroidal anti-inflammatory drugs (NSAIDs)	4,076	10.7%	4,080	10.7%	-0.010	-0.000
Sirolimus	*****	*****	*****	*****	0.000	0.000
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	17.7	13.9	17.8	16.0	-0.026	-0.002
Mean number of emergency room encounters	0.7	1.4	0.7	1.5	0.003	0.002
Mean number of inpatient hospital encounters	0.8	1.0	0.8	1.1	-0.001	-0.001
Mean number of non-acute institutional encounters	0.1	0.4	0.1	0.4	-0.002	-0.005
Mean number of other ambulatory encounters	7.9	11.8	8.0	11.8	-0.063	-0.005
<i>Mean number of filled prescriptions</i>	<i>30.9</i>	<i>19.9</i>	<i>27.2</i>	<i>20.5</i>	<i>3.681</i>	<i>0.182</i>
<i>Mean number of generics</i>	<i>12.9</i>	<i>5.0</i>	<i>11.8</i>	<i>5.5</i>	<i>1.105</i>	<i>0.210</i>
Mean number of unique drug classes	11.2	4.4	11.2	4.9	0.005	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. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ARB-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	35,088	100.0%	44,361	100.0%	-	-
Demographics					Standard Deviation	Standard Deviation
Mean age (years)	72.8	10.5	71.5	11.9	1.286	0.114
Age						
18-44 years	750	2.1%	1,666	3.8%	-1.618	-0.096
45-54 years	1,741	5.0%	3,126	7.0%	-2.085	-0.088
55-64 years	4,166	11.9%	6,193	14.0%	-2.087	-0.062
65+ years	28,431	81.0%	33,376	75.2%	5.790	0.140
Sex						
Female	13,649	38.9%	15,727	35.5%	3.447	0.071
Male	21,439	61.1%	28,634	64.5%	-3.447	-0.071
Race						
American Indian or Alaska Native	81	0.2%	145	0.3%	-0.096	-0.018
Asian	847	2.4%	532	1.2%	1.215	0.091
Black or African American	4,731	13.5%	5,990	13.5%	-0.020	-0.001
Native Hawaiian or Other Pacific Islander	45	0.1%	46	0.1%	0.025	0.007
Unknown	5,599	16.0%	7,272	16.4%	-0.436	-0.012
White	23,785	67.8%	30,376	68.5%	-0.688	-0.015
Hispanic Origin	879	2.5%	754	1.7%	0.805	0.056
Year						
2015	599	1.7%	429	1.0%	0.740	0.064
2016	4,411	12.6%	4,192	9.4%	3.122	0.100
2017	7,696	21.9%	9,295	21.0%	0.980	0.024
2018	9,949	28.4%	12,666	28.6%	-0.198	-0.004
2019	12,217	34.8%	17,427	39.3%	-4.466	-0.093
2020	216	5.3%	352	5.9%	-0.626	-0.027
Recorded History of:					Standard Deviation	Standard Deviation
Charlson/Elixhauser Combined Comorbidity Score ³	5.3	2.6	5.6	2.8	-0.307	-0.113
Ambulatory allergies or allergy treatment	18,821	53.6%	21,702	48.9%	4.718	0.094
Ambulatory allergies or treatment and not serious	15,800	45.0%	17,819	40.2%	4.861	0.098
Angioedema (-183, -1)	33	0.1%	60	0.1%	-0.041	-0.012
Angioedema (ever, -1)	533	1.5%	608	1.4%	0.148	0.012
Diabetes	18,696	53.3%	20,677	46.6%	6.672	0.134
Ischemic heart disease	27,367	78.0%	33,639	75.8%	2.165	0.051
Renal disorders	14,714	41.9%	19,754	44.5%	-2.596	-0.052
Serious allergies	4,439	12.7%	6,108	13.8%	-1.118	-0.033

Table 1k. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment of Angloedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 (Unadjusted, Aggregated), Fixed Ratio 1:1, Caliper: 0.05

Characteristic ^{1,2}	Medical Product				Covariate Balance	
	ARB-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	30,597	87.2%	35,674	80.4%	6.783	0.185
Everolimus	11	0.0%	12	0.0%	0.004	0.003
Nonsteroidal anti-inflammatory drugs (NSAIDs)	4,104	11.7%	4,447	10.0%	1.672	0.054
Sirolimus	*****	*****	*****	*****	-0.008	-0.006
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	19.0	14.7	18.3	17.3	0.710	0.044
Mean number of emergency room encounters	0.7	1.5	0.8	1.6	-0.099	-0.065
Mean number of inpatient hospital encounters	0.7	1.0	0.8	1.1	-0.091	-0.085
Mean number of non-acute institutional encounters	0.1	0.4	0.2	0.6	-0.093	-0.184
Mean number of other ambulatory encounters	7.4	10.6	9.4	14.4	-1.958	-0.154
<i>Mean number of filled prescriptions</i>	33.2	21.6	26.7	20.7	6.520	0.308
<i>Mean number of generics</i>	14.0	5.4	11.6	5.5	2.314	0.425
<i>Mean number of unique drug classes</i>	12.1	4.7	11.0	4.9	1.079	0.224

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. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment 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	
	ARB-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Patients (Number)	32,174	91.7%	32,174	72.5%	-	-
Demographics					Standard	Standard
Mean age (years)	72.6	10.6	72.7	11.3	-0.089	-0.008
Age					Standard	Standard
18-44 years	735	2.3%	797	2.5%	-0.193	-0.013
45-54 years	1,654	5.1%	1,881	5.8%	-0.706	-0.032
55-64 years	3,887	12.1%	4,200	13.1%	-0.973	-0.030
65+ years	25,898	80.5%	25,296	78.6%	1.871	0.050
Sex					Standard	Standard
Female	12,125	37.7%	12,141	37.7%	-0.050	-0.001
Male	20,049	62.3%	20,033	62.3%	0.050	0.001
Race					Standard	Standard
American Indian or Alaska Native	80	0.2%	82	0.3%	-0.006	-0.001
Asian	521	1.6%	497	1.5%	0.075	0.006
Black or African American	4,348	13.5%	4,349	13.5%	-0.003	-0.000
Native Hawaiian or Other Pacific Islander	36	0.1%	34	0.1%	0.006	0.002
Unknown	4,900	15.2%	4,860	15.1%	0.124	0.005
White	22,289	69.3%	22,352	69.5%	-0.196	-0.005
Hispanic Origin					Standard	Standard
Year					Standard	Standard
2015	431	1.3%	402	1.2%	0.090	0.008
2016	3,707	11.5%	3,657	11.4%	0.155	0.005
2017	7,013	21.8%	6,999	21.8%	0.044	0.001
2018	9,266	28.8%	9,270	28.8%	-0.012	-0.000
2019	11,554	35.9%	11,652	36.2%	-0.305	-0.006
2020	203	5.4%	194	5.1%	0.237	0.011
Recorded History of:					Standard	Standard
Charlson/Elixhauser Combined Comorbidity Score ³	Mean	Standard Deviation	Mean	Standard Deviation		
Ambulatory allergies or allergy treatment	16,841	52.3%	16,741	52.0%	0.311	0.006
Ambulatory allergies or treatment and not serious	14,056	43.7%	14,014	43.6%	0.131	0.003
Angioedema (-183, -1)	33	0.1%	34	0.1%	-0.003	-0.001
Angioedema (ever, -1)	493	1.5%	457	1.4%	0.112	0.009
Diabetes	16,478	51.2%	16,369	50.9%	0.339	0.007
Ischemic heart disease	24,964	77.6%	24,981	77.6%	-0.053	-0.001
Renal disorders	13,698	42.6%	13,783	42.8%	-0.264	-0.005
Serious allergies	4,136	12.9%	4,154	12.9%	-0.056	-0.002

Table 1I. Characteristics of New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, in Risk Assessment of Angloedema 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	
	ARB-SV 14-day		SV		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
History of Use:						
Diuretics (thiazides, potassium sparing, loop diuretics)	27,771	86.3%	27,925	86.8%	-0.479	-0.014
Everolimus	*****	*****	*****	*****	-0.003	-0.002
Nonsteroidal anti-inflammatory drugs (NSAIDs)	3,588	11.2%	3,534	11.0%	0.168	0.005
Sirolimus	*****	*****	*****	*****	0.000	0.000
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	18.8	14.6	18.7	17.1	0.048	0.003
Mean number of emergency room encounters	0.7	1.5	0.7	1.4	-0.005	-0.004
Mean number of inpatient hospital encounters	0.7	1.0	0.7	1.0	0.001	0.001
Mean number of non-acute institutional encounters	0.1	0.4	0.1	0.4	0.002	0.005
Mean number of other ambulatory encounters	7.6	10.9	7.5	10.5	0.055	0.005
<i>Mean number of filled prescriptions</i>	<i>32.0</i>	<i>20.4</i>	<i>29.0</i>	<i>21.0</i>	<i>2.985</i>	<i>0.144</i>
<i>Mean number of generics</i>	<i>13.6</i>	<i>5.2</i>	<i>12.4</i>	<i>5.4</i>	<i>1.150</i>	<i>0.217</i>
Mean number of unique drug classes	11.7	4.5	11.7	4.8	0.011	0.002

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Incidence Rate per 1,000 Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Average Person Number	Rate per 1,000 Person	Difference per 1,000 Person										
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	68,868	*****	*****	*****	*****	2.15	*****	-0.47	*****	0.83 (0.55, 1.24)	0.356								
ARB-SV	48,406	*****	*****	*****	*****	2.62	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	46,333	*****	*****	*****	*****	2.74	*****	-0.37	*****	0.88 (0.50, 1.56)	0.662								
ARB-SV	46,333	*****	*****	*****	*****	3.11	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	46,333	*****	*****	*****	*****	2.11	*****	-0.49	*****	0.81 (0.52, 1.28)	0.369								
ARB-SV	46,333	*****	*****	*****	*****	2.6	*****												
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV	68,868	*****	*****	*****	*****	3.5	*****	-0.38	*****	0.91 (0.45, 1.82)	0.784								
ARB-SV	48,406	*****	*****	*****	*****	3.89	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	46,333	*****	*****	*****	*****	4.46	*****	0.32	*****	1.08 (0.51, 2.29)	0.847								
ARB-SV	46,333	*****	*****	*****	*****	4.14	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	46,333	*****	*****	*****	*****	4.64	*****	0.88	*****	1.23 (0.59, 2.56)	0.575								
ARB-SV	46,333	*****	*****	*****	*****	3.76	*****												
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV	55,636	*****	*****	*****	*****	3.18	*****	0.15	*****	1.06 (0.43, 2.59)	0.904								
ARB-SV	38,892	*****	*****	*****	*****	3.02	*****												

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Number of Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per 1,000 Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence		Rate Difference in Risk per 1,000 Person Years		
							Rate per 1,000 New Users	Difference per 1,000 New Users			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	30,021	*****	*****	*****	*****	2.88	*****	-1.15	*****	0.71 (0.23, 2.25)	0.566
ARB-SV	30,021	*****	*****	*****	*****	4.03	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	37,183	*****	*****	*****	*****	2.37	*****	-0.77	*****	0.76 (0.26, 2.18)	0.604
ARB-SV	37,346	*****	*****	*****	*****	3.15	*****	*****	*****	*****	
61 - 90 Days											
Site-Adjusted Analysis											
ACEI-SV	37,553	*****	*****	*****	*****	2.5	*****	-1.07	*****	0.68 (0.24, 1.95)	0.477
ARB-SV	26,335	*****	*****	*****	*****	3.57	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	13,807	*****	*****	*****	*****	2.13	*****	-1.07	*****	0.67 (0.11, 3.99)	0.657
ARB-SV	13,807	*****	*****	*****	*****	3.2	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	25,121	*****	*****	*****	*****	1.61	*****	-2.11	*****	0.43 (0.11, 1.66)	0.219
ARB-SV	25,311	*****	*****	*****	*****	3.71	*****	*****	*****	*****	
91 - 180 Days											
Site-Adjusted Analysis											
ACEI-SV	30,181	*****	*****	*****	*****	0.52	*****	-1.72	*****	0.23 (0.06, 0.87)	0.029
ARB-SV	21,257	*****	*****	*****	*****	2.25	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	8,985	*****	*****	*****	*****	0.75	*****	0	*****	1.00 (0.06, 15.99)	1
ARB-SV	8,985	*****	*****	*****	*****	0.75	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	20,130	*****	*****	*****	*****	0.79	*****	-1.55	*****	0.34 (0.09, 1.24)	0.101
ARB-SV	20,464	*****	*****	*****	*****	2.33	*****	*****	*****	*****	
181 - 270 Days											
Site-Adjusted Analysis											
ACEI-SV	18,797	*****	*****	*****	*****	1.82	*****	0.3	*****	1.24 (0.36, 4.23)	0.734
ARB-SV	13,036	*****	*****	*****	*****	1.51	*****	*****	*****	*****	

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Number of Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence						Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
						Incidence Rate per 1,000 Person Years		Rate per 1,000 New Users Years		Difference in Risk per 1,000 New Users Years					
						Average Person Number of Events	Rate per Person Years	Average Person New Users	Rate per New Users Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²															
ACEI-SV	3,442	*****	*****	*****	*****	0	*****			-1.72	*****	-	-		
ARB-SV	3,442	*****	*****	*****	*****	1.72	*****								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05															
ACEI-SV	12,497	*****	*****	*****	*****	1.57	*****			0	*****	1.01 (0.25, 4.03)	0.992		
ARB-SV	12,557	*****	*****	*****	*****	1.57	*****								
271 - 365 Days															
Site-Adjusted Analysis															
ACEI-SV	13,147	*****	*****	*****	*****	1.72	*****			0.7	*****	1.71 (0.33, 8.81)	0.522		
ARB-SV	8,956	*****	*****	*****	*****	1.03	*****								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²															
ACEI-SV	1,630	*****	*****	*****	*****	0	*****			0	*****	-	-		
ARB-SV	1,630	*****	*****	*****	*****	0	*****								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05															
ACEI-SV	8,598	*****	*****	*****	*****	1.06	*****			0.53	*****	2.02 (0.18, 22.33)	0.565		
ARB-SV	8,641	*****	*****	*****	*****	0.53	*****								

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹							
							Incidence Rate per 1,000 Person Years		Difference in Risk per Person Years	Rate per 1,000 New Users									
							Average Number of Events	Rate per 1,000 Person Years											
No Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	68,785	*****	*****	*****	*****	2.07	*****	-0.2	*****	0.92 (0.61, 1.41)	0.71								
ARB-SV	48,350	*****	*****	*****	*****	2.26	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	46,272	*****	*****	*****	*****	2.61	*****	0	*****	1.00 (0.55, 1.83)	1								
ARB-SV	46,272	*****	*****	*****	*****	2.61	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	46,272	*****	*****	*****	*****	2.05	*****	-0.24	*****	0.90 (0.56, 1.43)	0.649								
ARB-SV	46,272	*****	*****	*****	*****	2.29	*****												
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV	68,785	*****	*****	*****	*****	3.31	*****	0.81	*****	1.33 (0.59, 2.98)	0.49								
ARB-SV	48,350	*****	*****	*****	*****	2.5	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	46,272	*****	*****	*****	*****	4.14	*****	1.28	*****	1.44 (0.62, 3.38)	0.396								
ARB-SV	46,272	*****	*****	*****	*****	2.87	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	46,272	*****	*****	*****	*****	4.36	*****	1.75	*****	1.67 (0.73, 3.82)	0.224								
ARB-SV	46,272	*****	*****	*****	*****	2.61	*****												
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV	55,566	*****	*****	*****	*****	2.91	*****	-0.11	*****	0.97 (0.39, 2.41)	0.944								
ARB-SV	38,851	*****	*****	*****	*****	3.03	*****												

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years				
							Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	29,989	*****	*****	*****	*****	2.88	*****	-1.15	*****	0.71 (0.23, 2.25)	0.566			
ARB-SV	29,989	*****	*****	*****	*****	4.03	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	37,131	*****	*****	*****	*****	2.38	*****	-0.77	*****	0.76 (0.26, 2.18)	0.604			
ARB-SV	37,302	*****	*****	*****	*****	3.15	*****							
61 - 90 Days														
Site-Adjusted Analysis														
ACEI-SV	37,510	*****	*****	*****	*****	2.51	*****	-0.56	*****	0.81 (0.27, 2.42)	0.711			
ARB-SV	26,307	*****	*****	*****	*****	3.07	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	13,790	*****	*****	*****	*****	2.13	*****	-1.07	*****	0.67 (0.11, 3.99)	0.657			
ARB-SV	13,790	*****	*****	*****	*****	3.2	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	25,090	*****	*****	*****	*****	1.61	*****	-1.58	*****	0.50 (0.13, 2.02)	0.333			
ARB-SV	25,283	*****	*****	*****	*****	3.19	*****							
91 - 180 Days														
Site-Adjusted Analysis														
ACEI-SV	30,151	*****	*****	*****	*****	0.52	*****	-1.73	*****	0.23 (0.06, 0.86)	0.029			
ARB-SV	21,233	*****	*****	*****	*****	2.25	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	8,981	*****	*****	*****	*****	0.75	*****	0	*****	1.00 (0.06, 15.99)	1			
ARB-SV	8,981	*****	*****	*****	*****	0.75	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	20,107	*****	*****	*****	*****	0.79	*****	-1.55	*****	0.34 (0.09, 1.24)	0.101			
ARB-SV	20,440	*****	*****	*****	*****	2.34	*****							

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years														
							Average Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years																
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	18,775	*****	*****	*****	*****	1.82	*****		0.3	*****	1.24 (0.36, 4.23)	0.734												
ARB-SV	13,024	*****	*****	*****	*****	1.52	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	3,442	*****	*****	*****	*****	0	*****		-1.72	*****	-	-												
ARB-SV	3,442	*****	*****	*****	*****	1.72	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	12,481	*****	*****	*****	*****	1.57	*****		0	*****	1.01 (0.25, 4.02)	0.993												
ARB-SV	12,544	*****	*****	*****	*****	1.57	*****																	
271 - 365 Days																								
Site-Adjusted Analysis																								
ACEI-SV	13,130	*****	*****	*****	*****	1.72	*****		0.7	*****	1.71 (0.33, 8.81)	0.522												
ARB-SV	8,947	*****	*****	*****	*****	1.03	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	1,631	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	1,631	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	8,587	*****	*****	*****	*****	1.06	0.23		0.53	*****	2.02 (0.18, 22.31)	0.565												
ARB-SV	8,632	*****	*****	*****	*****	0.53	0.12																	
Angioedema (-183, -1)																								
Overall																								
Site-Adjusted Analysis																								
ACEI-SV	83	*****	*****	*****	*****	72.23	*****		-261.11	*****	0.26 (0.05, 1.33)	0.105												
ARB-SV	56	*****	*****	*****	*****	333.33	*****																	

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence Rate per 1,000 Person Years		Difference in Risk per Person Years	Risk per 1,000 New Users				
							Rate per 1,000 Person Years	Risk per 1,000 New Users						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	46	*****	*****	*****	*****	164.47	*****	-328.95	*****	0.33 (0.03, 3.20)	0.341			
ARB-SV	46	*****	*****	*****	*****	493.42	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	46	*****	*****	*****	*****	64.77	*****	-143.57	*****	0.31 (0.03, 2.96)	0.308			
ARB-SV	46	*****	*****	*****	*****	208.33	*****							
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV	83	*****	*****	*****	*****	156.99	*****	-1089.9	*****	0.13 (0.02, 1.11)	0.063			
ARB-SV	56	*****	*****	*****	*****	1,246.88	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	46	*****	*****	*****	*****	332.23	*****	-664.45	*****	0.33 (0.03, 3.20)	0.341			
ARB-SV	46	*****	*****	*****	*****	996.68	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	46	*****	*****	*****	*****	285.71	*****	-628.92	*****	0.31 (0.03, 2.96)	0.308			
ARB-SV	46	*****	*****	*****	*****	914.63	*****							
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV	73	*****	*****	*****	*****	204.92	*****	204.92	*****	-	-			
ARB-SV	45	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	31	*****	*****	*****	*****	0	*****	0	*****	-	-			
ARB-SV	31	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	40	*****	*****	*****	*****	0	*****	0	*****	-	-			
ARB-SV	36	*****	*****	*****	*****	0	*****							

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years														
							Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years																
61 - 90 Days																								
Site-Adjusted Analysis																								
ACEI-SV	47	*****	*****	*****	*****	0	*****	-432.9	*****	-	-	-												
ARB-SV	30	*****	*****	*****	*****	432.9	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	17	*****	*****	*****	*****	0	*****	0	*****	-	-	-												
ARB-SV	17	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	27	*****	*****	*****	*****	0	*****	0	*****	-	-	-												
ARB-SV	25	*****	*****	*****	*****	0	*****																	
91 - 180 Days																								
Site-Adjusted Analysis																								
ACEI-SV	33	*****	*****	*****	*****	0	*****	0	*****	-	-	-												
ARB-SV	26	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	11	*****	*****	*****	*****	0	*****	0	*****	-	-	-												
ARB-SV	11	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	21	*****	*****	*****	*****	0	*****	0	*****	-	-	-												
ARB-SV	21	*****	*****	*****	*****	0	*****																	
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	23	*****	*****	*****	*****	0	*****	0	*****	-	-	-												
ARB-SV	15	*****	*****	*****	*****	0	*****																	

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 New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person		
							New Users	Years	New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-
ARB-SV	*****	*****	*****	*****	*****	0	*****				-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	14	*****	*****	*****	*****	0	*****		0	*****	-
ARB-SV	12	*****	*****	*****	*****	0	*****				-
271 - 365 Days											
Site-Adjusted Analysis											
ACEI-SV	18	*****	*****	*****	*****	0	*****		0	*****	-
ARB-SV	13	*****	*****	*****	*****	0	*****				-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-
ARB-SV	*****	*****	*****	*****	*****	0	*****				-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-
ARB-SV	*****	*****	*****	*****	*****	0	*****				-

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000 Person Years		Difference in Risk per Person Years	Rate per 1,000 New Users														
							Average Number of Events	Rate per 1,000 Person Years																
Race: Unknown																								
Overall																								
Site-Adjusted Analysis																								
ACEI-SV	11,340	*****	*****	*****	*****	1.28	*****	-0.22	*****	0.79 (0.21, 2.94)	0.723													
ARB-SV	7,857	*****	*****	*****	*****	1.51	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	7,448	*****	*****	*****	*****	0.81	*****	-0.81	*****	0.50 (0.05, 5.51)	0.571													
ARB-SV	7,448	*****	*****	*****	*****	1.62	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	7,448	*****	*****	*****	*****	1.2	*****	-0.38	*****	0.73 (0.16, 3.28)	0.686													
ARB-SV	7,448	*****	*****	*****	*****	1.58	*****																	
0 - 30 Days																								
Site-Adjusted Analysis																								
ACEI-SV	11,340	*****	*****	*****	*****	1.21	*****	-2.29	*****	0.34 (0.03, 3.75)	0.376													
ARB-SV	7,857	*****	*****	*****	*****	3.5	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	7,448	*****	*****	*****	*****	0	*****	-4.12	*****	-	-													
ARB-SV	7,448	*****	*****	*****	*****	4.12	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	7,448	*****	*****	*****	*****	1.85	*****	-1.83	*****	0.50 (0.05, 5.52)	0.572													
ARB-SV	7,448	*****	*****	*****	*****	3.68	*****																	
31 - 60 Days																								
Site-Adjusted Analysis																								
ACEI-SV	8,766	*****	*****	*****	*****	3.32	*****	3.32	*****	-	-													
ARB-SV	6,039	*****	*****	*****	*****	0	*****																	

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years				
							Average Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	4,446	*****	*****	*****	*****	3.84	*****	3.84	*****	-	-			
ARB-SV	4,446	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	5,703	*****	*****	*****	*****	2.56	*****	2.56	*****	-	-			
ARB-SV	5,747	*****	*****	*****	*****	0	*****							
61 - 90 Days														
Site-Adjusted Analysis														
ACEI-SV	6,045	*****	*****	*****	*****	2.23	*****							
ARB-SV	4,105	*****	*****	*****	*****	3.29	*****	-1.05	*****	0.59 (0.04, 9.43)	0.708			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	2,097	*****	*****	*****	*****	0	*****	0	*****	-	-			
ARB-SV	2,097	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	3,919	*****	*****	*****	*****	0	*****							
ARB-SV	3,904	*****	*****	*****	*****	3.45	*****	-3.45	*****	-	-			
91 - 180 Days														
Site-Adjusted Analysis														
ACEI-SV	4,821	*****	*****	*****	*****	0	*****							
ARB-SV	3,286	*****	*****	*****	*****	1.57	*****	-1.57	*****	-	-			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	1,344	*****	*****	*****	*****	0	*****							
ARB-SV	1,344	*****	*****	*****	*****	0	*****	0	*****	-	-			
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	3,119	*****	*****	*****	*****	0	*****							
ARB-SV	3,135	*****	*****	*****	*****	1.64	*****	-1.64	*****	-	-			

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person	Hazard Ratio (95% Confidence Interval) ¹														
							Number	Rate per 1,000																
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	3,040	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	2,080	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	552	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	552	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	1,935	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	1,991	*****	*****	*****	*****	0	*****																	
271 - 365 Days																								
Site-Adjusted Analysis																								
ACEI-SV	2,130	*****	*****	*****	*****	2.13	*****		2.13	*****	-	-												
ARB-SV	1,422	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	249	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	249	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	1,333	*****	*****	*****	*****	3.45	*****		3.45	*****	-	-												
ARB-SV	1,364	*****	*****	*****	*****	0	*****																	
Race: American Indian																								
Overall																								
Site-Adjusted Analysis																								
ACEI-SV	237	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	129	*****	*****	*****	*****	0	*****																	

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 New Users	Difference in Risk per 1,000 Person Years				
							Rate per 1,000 Person	Risk per 1,000 Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV	237	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	129	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	119	*****	*****	*****	*****	0	*****		0	*****	-	-		
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV	189	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	101	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	70	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	70	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	86	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	93	*****	*****	*****	*****	0	*****		0	*****	-	-		

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person	Hazard Ratio (95% Confidence Interval) ¹														
							Number	Rate per 1,000																
61 - 90 Days																								
Site-Adjusted Analysis																								
ACEI-SV	121	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	64	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	27	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	27	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	56	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	60	*****	*****	*****	*****	0	*****																	
91 - 180 Days																								
Site-Adjusted Analysis																								
ACEI-SV	98	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	56	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	19	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	19	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	44	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	53	*****	*****	*****	*****	0	*****																	
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	56	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	33	*****	*****	*****	*****	0	*****																	

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence Rate per 1,000		Difference in Risk per Person	Risk per 1,000				
							Person	Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	*****	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	24	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	32	*****	*****	*****	*****	0	*****							
271 - 365 Days														
Site-Adjusted Analysis														
ACEI-SV	39	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	19	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	*****	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	18	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	20	*****	*****	*****	*****	0	*****							
Race: Asian														
Overall														
Site-Adjusted Analysis														
ACEI-SV	662	*****	*****	*****	*****	0	*****		-2.93	*****	-	-		
ARB-SV	1,053	*****	*****	*****	*****	2.93	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	569	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	569	*****	*****	*****	*****	0	*****							

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 Person				
							Rate per 1,000 Person	Risk per 1,000						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	569	*****	*****	*****	*****	0	*****			-5.17	*****	-		
ARB-SV	569	*****	*****	*****	*****	5.17	*****					-		
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV	662	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	1,053	*****	*****	*****	*****	0	*****					-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	569	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	569	*****	*****	*****	*****	0	*****					-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	569	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	569	*****	*****	*****	*****	0	*****					-		
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV	509	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	774	*****	*****	*****	*****	0	*****					-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	336	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	336	*****	*****	*****	*****	0	*****					-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	442	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	434	*****	*****	*****	*****	0	*****					-		

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹														
							Number	Rate per 1,000 Person Years																
61 - 90 Days																								
Site-Adjusted Analysis																								
ACEI-SV	351	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	515	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	163	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	163	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	303	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	293	*****	*****	*****	*****	0	*****																	
91 - 180 Days																								
Site-Adjusted Analysis																								
ACEI-SV	267	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	411	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	99	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	99	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	231	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	234	*****	*****	*****	*****	0	*****																	
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	178	*****	*****	*****	*****	0	*****		-18.22	*****	-	-												
ARB-SV	271	*****	*****	*****	*****	18.22	*****																	

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years				
							Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	43	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	43	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	155	*****	*****	*****	*****	0	*****		-30.89	*****	-	-		
ARB-SV	160	*****	*****	*****	*****	30.89	*****							
271 - 365 Days														
Site-Adjusted Analysis														
ACEI-SV	126	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	183	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	20	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	20	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	114	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	107	*****	*****	*****	*****	0	*****							
Race: Black														
Overall														
Site-Adjusted Analysis														
ACEI-SV	8,897	*****	*****	*****	*****	5.61	*****		0.76	*****	1.15 (0.52, 2.57)	0.727		
ARB-SV	6,877	*****	*****	*****	*****	4.86	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	6,301	*****	*****	*****	*****	11.7	*****		7.44	*****	2.75 (0.88, 8.64)	0.083		
ARB-SV	6,301	*****	*****	*****	*****	4.25	*****							

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence Rate per 1,000		Difference in Risk per Person	Risk per 1,000				
							Rate per 1,000 New Users	Years		Risk per 1,000				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	6,301	*****	*****	*****	*****	6.76	*****		2	*****	1.43 (0.61, 3.35)	0.407		
ARB-SV	6,301	*****	*****	*****	*****	4.76	*****							
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV	8,897	*****	*****	*****	*****	12.08	*****		6.2	*****	2.07 (0.55, 7.79)	0.284		
ARB-SV	6,877	*****	*****	*****	*****	5.88	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	6,301	*****	*****	*****	*****	16.47	*****		9.41	*****	2.33 (0.60, 9.02)	0.22		
ARB-SV	6,301	*****	*****	*****	*****	7.06	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	6,301	*****	*****	*****	*****	14.96	*****		8.54	*****	2.34 (0.60, 9.05)	0.218		
ARB-SV	6,301	*****	*****	*****	*****	6.42	*****							
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV	7,131	*****	*****	*****	*****	10.81	*****		5.21	*****	1.91 (0.37, 9.86)	0.438		
ARB-SV	5,471	*****	*****	*****	*****	5.61	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	4,007	*****	*****	*****	*****	13.74	*****		9.16	*****	3.00 (0.31, 28.84)	0.341		
ARB-SV	4,007	*****	*****	*****	*****	4.58	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	5,035	*****	*****	*****	*****	12.15	*****		6.03	*****	1.99 (0.37, 10.88)	0.426		
ARB-SV	5,012	*****	*****	*****	*****	6.12	*****							

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person	Hazard Ratio (95% Confidence Interval) ¹														
							Number	Rate per 1,000																
61 - 90 Days																								
Site-Adjusted Analysis																								
ACEI-SV	4,319	*****	*****	*****	*****	0	*****	-8.17	*****	-	-	-												
ARB-SV	3,357	*****	*****	*****	*****	8.17	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	1,556	*****	*****	*****	*****	0	*****	0	*****	-	-	-												
ARB-SV	1,556	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	3,121	*****	*****	*****	*****	0	*****	-8.92	*****	-	-	-												
ARB-SV	3,074	*****	*****	*****	*****	8.92	*****																	
91 - 180 Days																								
Site-Adjusted Analysis																								
ACEI-SV	3,257	*****	*****	*****	*****	1.69	*****	-0.5	*****	0.76 (0.05, 12.20)	0.848													
ARB-SV	2,566	*****	*****	*****	*****	2.19	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	881	*****	*****	*****	*****	8.04	*****	8.04	*****	-	-	-												
ARB-SV	881	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	2,362	*****	*****	*****	*****	2.32	*****	-0.06	*****	0.97 (0.06, 15.57)	0.985													
ARB-SV	2,353	*****	*****	*****	*****	2.38	*****																	
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	1,845	*****	*****	*****	*****	2.7	*****	-0.8	*****	0.77 (0.05, 12.24)	0.85													
ARB-SV	1,418	*****	*****	*****	*****	3.5	*****																	

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence Rate per 1,000		Difference in Risk per Person	Risk per 1,000				
							Person	Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	299	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	299	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	1,348	*****	*****	*****	*****	3.68	*****		-0.12	*****	0.98 (0.06, 15.61)	0.986		
ARB-SV	1,310	*****	*****	*****	*****	3.8	*****							
271 - 365 Days														
Site-Adjusted Analysis														
ACEI-SV	1,243	*****	*****	*****	*****	0	*****				-	-		
ARB-SV	962	*****	*****	*****	*****	4.89	*****		-4.89	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	133	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	133	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	908	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	886	*****	*****	*****	*****	0	*****							
Race: Pacific Islander														
Overall														
Site-Adjusted Analysis														
ACEI-SV	66	*****	*****	*****	*****	52.19	*****		52.19	*****	-	-		
ARB-SV	59	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹														
ACEI-SV	50	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV	50	*****	*****	*****	*****	0	*****							

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 Person				
							Average Person	Average Years						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	50	*****	*****	*****	*****	0	*****				-	-		
ARB-SV	50	*****	*****	*****	*****	0	*****	0	*****					
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV	66	*****	*****	*****	*****	0	*****			-				
ARB-SV	59	*****	*****	*****	*****	0	*****	0	*****	-				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹														
ACEI-SV	50	*****	*****	*****	*****	0	*****			-				
ARB-SV	50	*****	*****	*****	*****	0	*****	0	*****	-				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	50	*****	*****	*****	*****	0	*****			-				
ARB-SV	50	*****	*****	*****	*****	0	*****	0	*****	-				
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV	53	*****	*****	*****	*****	0	*****			-				
ARB-SV	51	*****	*****	*****	*****	0	*****	0	*****	-				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹														
ACEI-SV	37	*****	*****	*****	*****	0	*****			-				
ARB-SV	37	*****	*****	*****	*****	0	*****	0	*****	-				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	40	*****	*****	*****	*****	0	*****			-				
ARB-SV	44	*****	*****	*****	*****	0	*****	0	*****	-				

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000 Person Years		Difference in Risk per Person Years	Rate per 1,000 New Users Years														
							Number	Events																
61 - 90 Days																								
Site-Adjusted Analysis																								
ACEI-SV	37	*****	*****	*****	*****	364.96	*****				-	-												
ARB-SV	34	*****	*****	*****	*****	0	*****	364.96	*****															
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹																								
ACEI-SV	16	*****	*****	*****	*****	0	*****	0	*****		-	-												
ARB-SV	16	*****	*****	*****	*****	0	*****	0	*****		-													
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	27	*****	*****	*****	*****	0	*****	0	*****		-	-												
ARB-SV	31	*****	*****	*****	*****	0	*****	0	*****		-													
91 - 180 Days																								
Site-Adjusted Analysis																								
ACEI-SV	31	*****	*****	*****	*****	0	*****	0	*****		-	-												
ARB-SV	22	*****	*****	*****	*****	0	*****	0	*****		-													
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹																								
ACEI-SV	11	*****	*****	*****	*****	0	*****	0	*****		-	-												
ARB-SV	11	*****	*****	*****	*****	0	*****	0	*****		-													
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	24	*****	*****	*****	*****	0	*****	0	*****		-	-												
ARB-SV	18	*****	*****	*****	*****	0	*****	0	*****		-													

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person	Hazard Ratio (95% Confidence Interval) ¹														
							Number	Events																
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	16	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV	13	*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹																								
ACEI-SV		*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV		*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	12	*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV		*****	*****	*****	*****	0	*****																	
271 - 365 Days																								
Site-Adjusted Analysis																								
ACEI-SV		*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV		*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹																								
ACEI-SV		*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV		*****	*****	*****	*****	0	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV		*****	*****	*****	*****	0	*****		0	*****	-	-												
ARB-SV		*****	*****	*****	*****	0	*****																	
Race: White																								
Overall																								
Site-Adjusted Analysis																								
ACEI-SV	47,666	*****	*****	*****	*****	1.79	*****		-0.69	*****	0.73 (0.44, 1.21)	0.218												
ARB-SV	32,431	*****	*****	*****	*****	2.48	*****																	

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence Rate per 1,000		Difference in Risk per Person	Risk per 1,000				
							Rate per 1,000 New Users	Years		Risk per 1,000				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹														
ACEI-SV	31,449	*****	*****	*****	*****	2.09	*****		-0.52	*****	0.80 (0.37, 1.71)	0.565		
ARB-SV	31,449	*****	*****	*****	*****	2.62	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	31,449	*****	*****	*****	*****	1.6	*****		-0.87	*****	0.65 (0.36, 1.17)	0.151		
ARB-SV	31,449	*****	*****	*****	*****	2.46	*****							
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV	47,666	*****	*****	*****	*****	2.52	*****		-1.19	*****	0.69 (0.27, 1.73)	0.425		
ARB-SV	32,431	*****	*****	*****	*****	3.7	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹														
ACEI-SV	31,449	*****	*****	*****	*****	3.71	*****		0.46	*****	1.14 (0.41, 3.15)	0.796		
ARB-SV	31,449	*****	*****	*****	*****	3.25	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	31,449	*****	*****	*****	*****	3.4	*****		0.01	*****	1.00 (0.38, 2.67)	0.996		
ARB-SV	31,449	*****	*****	*****	*****	3.39	*****							
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV	38,991	*****	*****	*****	*****	1.88	*****		-1.43	*****	0.56 (0.17, 1.83)	0.338		
ARB-SV	26,458	*****	*****	*****	*****	3.3	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05¹														
ACEI-SV	20,913	*****	*****	*****	*****	0.82	*****		-3.27	*****	0.20 (0.02, 1.71)	0.142		
ARB-SV	20,913	*****	*****	*****	*****	4.08	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	25,564	*****	*****	*****	*****	0.57	*****		-2.83	*****	0.17 (0.02, 1.40)	0.099		
ARB-SV	25,704	*****	*****	*****	*****	3.4	*****							

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹														
							Average Person	Risk per 1,000 Person Years																
61 - 90 Days																								
Site-Adjusted Analysis																								
ACEI-SV	26,687	*****	*****	*****	*****	2.5	*****	-0.42	*****	0.85 (0.23, 3.18)	0.815													
ARB-SV	18,263	*****	*****	*****	*****	2.93	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	9,915	*****	*****	*****	*****	2.94	*****	0	*****	1.00 (0.14, 7.10)	1													
ARB-SV	9,915	*****	*****	*****	*****	2.94	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	17,489	*****	*****	*****	*****	2.3	*****	-0.71	*****	0.76 (0.17, 3.41)	0.723													
ARB-SV	17,761	*****	*****	*****	*****	3.01	*****																	
91 - 180 Days																								
Site-Adjusted Analysis																								
ACEI-SV	21,713	*****	*****	*****	*****	0.48	*****	-2	*****	0.20 (0.04, 0.95)	0.043													
ARB-SV	14,919	*****	*****	*****	*****	2.48	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	6,608	*****	*****	*****	*****	1	*****	0	*****	1.00 (0.06, 15.99)	1													
ARB-SV	6,608	*****	*****	*****	*****	1	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	14,197	*****	*****	*****	*****	0.74	*****	-1.81	*****	0.29 (0.06, 1.40)	0.123													
ARB-SV	14,521	*****	*****	*****	*****	2.55	*****																	
181 - 270 Days																								
Site-Adjusted Analysis																								
ACEI-SV	13,670	*****	*****	*****	*****	2.14	*****	1.07	*****	2.02 (0.41, 10.01)	0.389													
ARB-SV	9,226	*****	*****	*****	*****	1.07	*****																	

Table 4. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person		
							New Users	Years	New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	2,617	*****	*****	*****	*****	0	*****		0	*****	-
ARB-SV	2,617	*****	*****	*****	*****	0	*****				-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	8,929	*****	*****	*****	*****	1.65	*****		0.55	*****	1.51 (0.25, 9.04)
ARB-SV	8,979	*****	*****	*****	*****	1.1	*****				0.651
271 - 365 Days											
Site-Adjusted Analysis											
ACEI-SV	9,611	*****	*****	*****	*****	1.88	*****		1.16	*****	2.65 (0.30, 23.71)
ARB-SV	6,362	*****	*****	*****	*****	0.72	*****				0.383
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	1,254	*****	*****	*****	*****	0	*****		0	*****	-
ARB-SV	1,254	*****	*****	*****	*****	0	*****				-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	6,159	*****	*****	*****	*****	0.74	*****		0	*****	1.01 (0.06, 16.07)
ARB-SV	6,198	*****	*****	*****	*****	0.74	*****				0.997

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 5. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years										
							1,000 Person Years	Risk per New Users	Risk per 1,000 New Users										
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	68,829	*****	*****	*****	*****	2.15	*****												
SV	43,140	*****	*****	*****	*****	1.36	*****	0.78	*****	1.60 (0.96, 2.66)	0.069								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	41,518	*****	*****	*****	*****	2.91	*****												
SV	41,518	*****	*****	*****	*****	1.32	*****	1.59	*****	2.20 (1.04, 4.65)	0.039								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	41,518	*****	*****	*****	*****	2.06	*****												
SV	41,518	*****	*****	*****	*****	1.27	*****	0.79	*****	1.62 (0.91, 2.89)	0.103								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV	68,829	*****	*****	*****	*****	3.5	*****												
SV	43,140	*****	*****	*****	*****	1.17	*****	2.33	*****	2.98 (1.01, 8.80)	0.048								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	41,518	*****	*****	*****	*****	3.68	*****												
SV	41,518	*****	*****	*****	*****	1.34	*****	2.34	*****	2.75 (0.88, 8.64)	0.083								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	41,518	*****	*****	*****	*****	3.56	*****												
SV	41,518	*****	*****	*****	*****	1.21	*****	2.34	*****	2.92 (0.93, 9.18)	0.066								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV	55,600	*****	*****	*****	*****	3.18	*****												
SV	39,259	*****	*****	*****	*****	1.52	*****	1.66	*****	2.10 (0.68, 6.50)	0.2								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	30,516	*****	*****	*****	*****	3.44	*****												
SV	30,516	*****	*****	*****	*****	1.72	*****	1.72	*****	2.00 (0.50, 8.00)	0.327								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	33,361	*****	*****	*****	*****	3.1	*****												
SV	37,889	*****	*****	*****	*****	1.57	*****	1.53	*****	1.96 (0.57, 6.69)	0.284								

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years										
							Rate per 1,000 New Users	Difference in Rate per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV	37,527	*****	*****	*****	*****	2.5	*****	0.43	*****	1.21 (0.35, 4.12)	0.766								
SV	25,725	*****	*****	*****	*****	2.07	*****	0	*****	1.00 (0.06, 15.99)	1								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	13,424	*****	*****	*****	*****	1.09	*****	0	*****	1.00 (0.06, 15.99)	1								
SV	13,424	*****	*****	*****	*****	1.09	*****	0	*****	1.00 (0.06, 15.99)	1								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	22,364	*****	*****	*****	*****	1.81	*****	-0.33	*****	0.84 (0.19, 3.75)	0.82								
SV	24,864	*****	*****	*****	*****	2.14	*****	0	*****	0.84 (0.19, 3.75)	0.82								
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV	30,162	*****	*****	*****	*****	0.52	*****	-1.11	*****	0.33 (0.08, 1.30)	0.113								
SV	20,877	*****	*****	*****	*****	1.63	*****	0	*****	0.33 (0.08, 1.30)	0.113								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	8,688	*****	*****	*****	*****	1.66	*****	0.83	*****	2.00 (0.18, 22.06)	0.571								
SV	8,688	*****	*****	*****	*****	0.83	*****	0	*****	2.00 (0.18, 22.06)	0.571								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	17,798	*****	*****	*****	*****	0.6	*****	-0.52	*****	0.53 (0.10, 2.90)	0.465								
SV	20,213	*****	*****	*****	*****	1.12	*****	0	*****	0.53 (0.10, 2.90)	0.465								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	18,794	*****	*****	*****	*****	1.82	*****	0.91	*****	1.97 (0.41, 9.47)	0.399								
SV	11,373	*****	*****	*****	*****	0.91	*****	0	*****	1.97 (0.41, 9.47)	0.399								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	2,885	*****	*****	*****	*****	0	*****	-2.12	*****	-	-								
SV	2,885	*****	*****	*****	*****	2.12	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	10,722	*****	*****	*****	*****	1.39	*****	0.46	*****	1.46 (0.24, 8.72)	0.681								
SV	11,071	*****	*****	*****	*****	0.93	*****	0	*****	1.46 (0.24, 8.72)	0.681								

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years										
							Average Person	Average Risk per 1,000 New Users	Risk per 1,000 Person										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV	13,146	*****	*****	*****	*****	1.72	*****												
SV	7,133	*****	*****	*****	*****	0.66	*****	1.06	*****	2.57 (0.30, 21.97)	0.39								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	1,270	*****	*****	*****	*****	8.45	*****												
SV	1,270	*****	*****	*****	*****	0	*****	8.45	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	7,231	*****	*****	*****	*****	1.91	*****												
SV	6,972	*****	*****	*****	*****	0.67	*****	1.24	*****	2.76 (0.29, 26.50)	0.38								

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 6. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Incidence Rate per 1,000		Difference in Risk per Person Years	Hazard Ratio (95% Confidence Interval) ¹														
							Average Person	Risk per 1,000																
No Angioedema (-183, -1)																								
Overall																								
Site-Adjusted Analysis																								
ACEI-SV	68,746	*****	*****	*****	*****	2.07	*****		0.96	*****	1.90 (1.09, 3.29)	0.023												
SV	43,081	*****	*****	*****	*****	1.11	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	41,454	*****	*****	*****	*****	2.91	*****		1.99	*****	3.14 (1.34, 7.36)	0.008												
SV	41,454	*****	*****	*****	*****	0.93	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	41,454	*****	*****	*****	*****	2.06	*****		1.06	*****	2.05 (1.10, 3.82)	0.024												
SV	41,454	*****	*****	*****	*****	1.01	*****																	
0 - 30 Days																								
Site-Adjusted Analysis																								
ACEI-SV	68,746	*****	*****	*****	*****	3.31	*****		2.73	*****	5.61 (1.30, 24.29)	0.021												
SV	43,081	*****	*****	*****	*****	0.59	*****																	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ACEI-SV	41,454	*****	*****	*****	*****	3.68	*****		3.01	*****	5.50 (1.22, 24.81)	0.027												
SV	41,454	*****	*****	*****	*****	0.67	*****																	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ACEI-SV	41,454	*****	*****	*****	*****	3.56	*****		2.96	*****	5.83 (1.29, 26.32)	0.022												
SV	41,454	*****	*****	*****	*****	0.61	*****																	
31 - 60 Days																								
Site-Adjusted Analysis																								
ACEI-SV	55,530	*****	*****	*****	*****	2.92	*****		1.4	*****	1.92 (0.61, 6.03)	0.264												
SV	39,207	*****	*****	*****	*****	1.52	*****																	

Table 6. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Rate			Difference	
							Incidence		Rate per 1,000 New Users	Difference per 1,000 Person Years	Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹	
							Average Person	Average Person	Risk per 1,000 Person	in Risk per 1,000 Person	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹	Wald P-Value ¹	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	30,472	*****	*****	*****	*****	3.45	*****			1.72	*****	2.00 (0.50, 8.00)	0.327	
SV	30,472	*****	*****	*****	*****	1.72	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	33,309	*****	*****	*****	*****	3.1	*****			1.53	*****	1.96 (0.57, 6.69)	0.284	
SV	37,832	*****	*****	*****	*****	1.57	*****							
61 - 90 Days														
Site-Adjusted Analysis														
ACEI-SV	37,484	*****	*****	*****	*****	2.51	*****			0.95	*****	1.61 (0.42, 6.22)	0.491	
SV	25,688	*****	*****	*****	*****	1.56	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	13,401	*****	*****	*****	*****	1.1	*****			0	*****	1.00 (0.06, 15.99)	1	
SV	13,401	*****	*****	*****	*****	1.1	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	22,332	*****	*****	*****	*****	1.81	*****			0.2	*****	1.12 (0.23, 5.55)	0.89	
SV	24,823	*****	*****	*****	*****	1.61	*****							
91 - 180 Days														
Site-Adjusted Analysis														
ACEI-SV	30,132	*****	*****	*****	*****	0.52	*****			-0.84	*****	0.39 (0.09, 1.65)	0.201	
SV	20,847	*****	*****	*****	*****	1.36	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	8,674	*****	*****	*****	*****	1.66	*****			1.66	*****	-	-	
SV	8,674	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	17,773	*****	*****	*****	*****	0.6	*****			-0.24	*****	0.71 (0.12, 4.25)	0.708	
SV	20,180	*****	*****	*****	*****	0.84	*****							

Table 6. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Rate			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence		Rate per 1,000 New Users	Difference in Risk per Person Years		Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Difference per 1,000 Person Years	Risk per 1,000 Person Years													
181 - 270 Days																						
Site-Adjusted Analysis																						
ACEI-SV	18,772	*****	*****	*****	*****	1.82	*****			0.91	*****	1.97 (0.41, 9.46)	0.399									
SV	11,356	*****	*****	*****	*****	0.91	*****															
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ACEI-SV	2,887	*****	*****	*****	*****	0	*****		-2.11	*****		-	-									
SV	2,887	*****	*****	*****	*****	2.11	*****															
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ACEI-SV	10,707	*****	*****	*****	*****	1.39	*****		0.46	*****	1.46 (0.24, 8.72)	0.681										
SV	11,052	*****	*****	*****	*****	0.93	*****															
271 - 365 Days																						
Site-Adjusted Analysis																						
ACEI-SV	13,129	*****	*****	*****	*****	1.72	*****		1.06	*****	2.56 (0.30, 21.95)	0.39										
SV	7,122	*****	*****	*****	*****	0.66	*****															
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ACEI-SV	1,269	*****	*****	*****	*****	8.46	*****		8.46	*****		-	-									
SV	1,269	*****	*****	*****	*****	0	*****															
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ACEI-SV	7,219	*****	*****	*****	*****	1.91	*****		1.24	*****	2.75 (0.29, 26.48)	0.38										
SV	6,959	*****	*****	*****	*****	0.67	*****															
Angioedema (-183, -1)																						
Overall																						
Site-Adjusted Analysis																						
ACEI-SV	83	*****	*****	*****	*****	72.23	*****		-105.31	*****	0.40 (0.07, 2.17)	0.287										
SV	59	*****	*****	*****	*****	177.54	*****															

Table 6. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence Rate per 1,000		Difference in Risk per Person	Rate per 1,000				
							Number	Person Years						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	38	*****	*****	*****	*****	0	*****		-133.51	*****	-	-		
SV	38	*****	*****	*****	*****	133.51	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	38	*****	*****	*****	*****	0	*****		-131.41	*****	-	-		
SV	38	*****	*****	*****	*****	131.41	*****							
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV	83	*****	*****	*****	*****	155.04	*****		-274.15	*****	0.36 (0.03, 3.98)	0.405		
SV	59	*****	*****	*****	*****	429.18	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	38	*****	*****	*****	*****	0	*****		0	*****	-	-		
SV	38	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	38	*****	*****	*****	*****	0	*****		0	*****	-	-		
SV	38	*****	*****	*****	*****	0	*****							
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV	74	*****	*****	*****	*****	186.22	*****		186.22	*****	-	-		
SV	54	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV	32	*****	*****	*****	*****	0	*****		0	*****	-	-		
SV	32	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-		
SV	36	*****	*****	*****	*****	0	*****							

Table 6. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 New Users		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 Person Years											
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV	47	*****	*****	*****	*****	0	*****			-	-								
SV	39	*****	*****	*****	*****	348.43	*****	-348.43	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	27	*****	*****	*****	*****	0	*****			-	-								
SV	27	*****	*****	*****	*****	757.58	*****	-757.58	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	23	*****	*****	*****	*****	0	*****			-	-								
SV	29	*****	*****	*****	*****	480.77	*****	-480.77	*****										
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV	34	*****	*****	*****	*****	0	*****			-	-								
SV	31	*****	*****	*****	*****	159.24	*****	-159.24	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	12	*****	*****	*****	*****	0	*****			-	-								
SV	12	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	19	*****	*****	*****	*****	0	*****			-	-								
SV	22	*****	*****	*****	*****	228.31	*****	-228.31	*****										
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	23	*****	*****	*****	*****	0	*****			-	-								
SV	20	*****	*****	*****	*****	0	*****	0	*****										

Table 6. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence Rate per 1,000		Difference in Risk per Person		
							Rate per 1,000 New Users	Years	Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	12	*****	*****	*****	*****	0	*****		0	*****	-
SV	16	*****	*****	*****	*****	0	*****		0	*****	-
271 - 365 Days											
Site-Adjusted Analysis											
ACEI-SV	19	*****	*****	*****	*****	0	*****		0	*****	-
SV	14	*****	*****	*****	*****	0	*****		0	*****	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	11	*****	*****	*****	*****	0	*****		0	*****	-
SV	11	*****	*****	*****	*****	0	*****		0	*****	-

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 Person Years		Difference in Risk per Person Years										
							Rate per 1,000 New Users	Difference in Risk per 1,000 New Users											
Race: Unknown																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	11,333	*****	*****	*****	*****	1.28	*****												
SV	7,114	*****	*****	*****	*****	0.76	*****	0.52	*****	1.75 (0.34, 9.03)	0.504								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	6,597	*****	*****	*****	*****	1.67	*****												
SV	6,597	*****	*****	*****	*****	0.84	*****	0.84	*****	2.00 (0.18, 22.06)	0.571								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	6,597	*****	*****	*****	*****	1.37	*****												
SV	6,597	*****	*****	*****	*****	0.41	*****	0.97	*****	3.43 (0.36, 33.01)	0.286								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV	11,333	*****	*****	*****	*****	1.21	*****												
SV	7,114	*****	*****	*****	*****	0	*****	1.21	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	6,597	*****	*****	*****	*****	0	*****												
SV	6,597	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	6,597	*****	*****	*****	*****	0	*****												
SV	6,597	*****	*****	*****	*****	0	*****	0	*****	-	-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV	8,756	*****	*****	*****	*****	3.33	*****												
SV	6,412	*****	*****	*****	*****	0	*****	3.33	*****	-	-								

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years		
							1,000 Person Years	Risk per New Users	Risk per 1,000 Person Years		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	4,632	*****	*****	*****	*****	3.69	*****			-	-
SV	4,632	*****	*****	*****	*****	0	*****	3.69	*****		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	5,084	*****	*****	*****	*****	5.75	*****			-	-
SV	5,989	*****	*****	*****	*****	0	*****	5.75	*****		
61 - 90 Days											
Site-Adjusted Analysis											
ACEI-SV	6,037	*****	*****	*****	*****	2.23	*****				
SV	4,335	*****	*****	*****	*****	3.08	*****	-0.85	*****	0.71 (0.04, 11.29)	0.805
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	2,148	*****	*****	*****	*****	6.89	*****				
SV	2,148	*****	*****	*****	*****	6.89	*****	0	*****	1.00 (0.06, 15.99)	1
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	3,481	*****	*****	*****	*****	3.9	*****				
SV	4,056	*****	*****	*****	*****	3.29	*****	0.61	*****	1.19 (0.07, 19.05)	0.902
91 - 180 Days											
Site-Adjusted Analysis											
ACEI-SV	4,815	*****	*****	*****	*****	0	*****			-	-
SV	3,512	*****	*****	*****	*****	1.56	*****	-1.56	*****		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	1,367	*****	*****	*****	*****	0	*****			-	-
SV	1,367	*****	*****	*****	*****	0	*****	0	*****		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	2,731	*****	*****	*****	*****	0	*****			-	-
SV	3,285	*****	*****	*****	*****	0	*****	0	*****		

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per 1,000 Person Years	Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 New Users											
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	3,039	*****	*****	*****	*****	0	*****			-	-								
SV	2,015	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	488	*****	*****	*****	*****	0	*****			-	-								
SV	488	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	1,668	*****	*****	*****	*****	0	*****			-	-								
SV	1,901	*****	*****	*****	*****	0	*****	0	*****										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV	2,127	*****	*****	*****	*****	2.13	*****			-	-								
SV	1,276	*****	*****	*****	*****	0	*****	2.13	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	217	*****	*****	*****	*****	0	*****			-	-								
SV	217	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	1,130	244.26	78.95	0.22	0	0	*****			-	-								
SV	1,212	260.05	78.37	0.21	0	0	*****	0	*****										
Race: American Indian																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	237	*****	*****	*****	*****	0	*****			-	-								
SV	139	*****	*****	*****	*****	0	*****	0	*****										

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000		Difference in Rate per 1,000		
							Person Years	New Users	Person Years		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
0 - 30 Days											
Site-Adjusted Analysis											
ACEI-SV	237	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	139	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	117	*****	*****	*****	*****	0	*****	0	*****	-	-
31 - 60 Days											
Site-Adjusted Analysis											
ACEI-SV	188	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	121	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	84	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	84	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	97	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	101	*****	*****	*****	*****	0	*****	0	*****	-	-

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 Person Years		Difference in Rate per 1,000 Person Years										
							New Users	Years	New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV	121	*****	*****	*****	*****	0	*****		0	*****	-								
SV	83	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	34	*****	*****	*****	*****	0	*****		0	*****	-								
SV	34	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	57	*****	*****	*****	*****	0	*****		0	*****	-								
SV	66	*****	*****	*****	*****	0	*****		0	*****	-								
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV	98	*****	*****	*****	*****	0	*****		0	*****	-								
SV	62	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	21	*****	*****	*****	*****	0	*****		0	*****	-								
SV	21	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	45	*****	*****	*****	*****	0	*****		0	*****	-								
SV	53	*****	*****	*****	*****	0	*****		0	*****	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	55	*****	*****	*****	*****	0	*****		0	*****	-								
SV	33	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-								
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	22	*****	*****	*****	*****	0	*****		0	*****	-								
SV	30	*****	*****	*****	*****	0	*****		0	*****	-								

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per 1,000 Person Years	Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV	39	*****	*****	*****	*****	0	*****			-	-								
SV	18	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV		*****	*****	*****	*****	0	*****			-	-								
SV		*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	15	*****	*****	*****	*****	0	*****			-	-								
SV	16	*****	*****	*****	*****	0	*****	0	*****										
Race: Asian																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	664	*****	*****	*****	*****	0	*****			-	-								
SV	531	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	459	*****	*****	*****	*****	0	*****			-	-								
SV	459	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	459	*****	*****	*****	*****	0	*****			-	-								
SV	459	*****	*****	*****	*****	0	*****	0	*****										

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per 1,000 Person Years	Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹										
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV	664	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	531	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	459	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	459	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	459	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	459	*****	*****	*****	*****	0	*****	0	*****	-	-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV	511	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	490	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	325	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	325	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	354	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	422	*****	*****	*****	*****	0	*****	0	*****	-	-								
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV	352	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	333	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	150	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	150	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	247	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	285	*****	*****	*****	*****	0	*****	0	*****	-	-								

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per Person 1,000	Difference in Risk per Person 1,000										
							Rate per 1,000 New Users	Years	New Users										
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV	268	*****	*****	*****	*****	0	*****		0	*****	-								
SV	254	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	93	*****	*****	*****	*****	0	*****		0	*****	-								
SV	93	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	195	*****	*****	*****	*****	0	*****		0	*****	-								
SV	222	*****	*****	*****	*****	0	*****		0	*****	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	178	*****	*****	*****	*****	0	*****		0	*****	-								
SV	138	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	35	*****	*****	*****	*****	0	*****		0	*****	-								
SV	35	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	126	*****	*****	*****	*****	0	*****		0	*****	-								
SV	123	*****	*****	*****	*****	0	*****		0	*****	-								
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV	127	*****	*****	*****	*****	0	*****		0	*****	-								
SV	89	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	17	*****	*****	*****	*****	0	*****		0	*****	-								
SV	17	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	88	*****	*****	*****	*****	0	*****		0	*****	-								
SV	79	*****	*****	*****	*****	0	*****		0	*****	-								

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years										
							1,000 Person Years	New Users	Risk per 1,000 Person Years										
Race: Black																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	8,906	*****	*****	*****	*****	5.61	*****												
SV	5,806	*****	*****	*****	*****	4.06	*****	1.55	*****	1.43 (0.58, 3.51)	0.434								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	5,469	*****	*****	*****	*****	5.99	*****												
SV	5,469	*****	*****	*****	*****	4.79	*****	1.2	*****	1.25 (0.34, 4.65)	0.739								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	5,469	*****	*****	*****	*****	3.77	*****												
SV	5,469	*****	*****	*****	*****	3.66	*****	0.11	*****	1.06 (0.34, 3.29)	0.919								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV	8,906	*****	*****	*****	*****	12.07	*****												
SV	5,806	*****	*****	*****	*****	2.17	*****	9.9	*****	5.44 (0.68, 43.51)	0.11								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	5,469	*****	*****	*****	*****	10.15	*****												
SV	5,469	*****	*****	*****	*****	2.54	*****	7.61	*****	4.00 (0.45, 35.79)	0.215								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	5,469	*****	*****	*****	*****	9.81	*****												
SV	5,469	*****	*****	*****	*****	2.31	*****	7.51	*****	4.23 (0.47, 37.88)	0.197								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV	7,138	*****	*****	*****	*****	10.8	*****												
SV	5,277	*****	*****	*****	*****	2.98	*****	7.82	*****	3.71 (0.43, 31.76)	0.231								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	4,000	*****	*****	*****	*****	4.75	*****												
SV	4,000	*****	*****	*****	*****	0	*****	4.75	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	4,389	*****	*****	*****	*****	7.06	*****												
SV	4,983	*****	*****	*****	*****	3.15	*****	3.91	*****	2.35 (0.21, 25.95)	0.485								

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years										
							1,000 New Users	Years	Risk per 1,000 Person										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV	4,325	*****	*****	*****	*****	0	*****			-	-								
SV	3,036	*****	*****	*****	*****	4.49	*****	-4.49	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	1,369	*****	*****	*****	*****	0	*****			-	-								
SV	1,369	*****	*****	*****	*****	11.12	*****	-11.12	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	2,635	*****	*****	*****	*****	0	*****			-	-								
SV	2,874	*****	*****	*****	*****	4.74	*****	-4.74	*****										
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV	3,259	*****	*****	*****	*****	1.69	*****			0.30 (0.03, 3.36)	0.332								
SV	2,303	*****	*****	*****	*****	5.41	*****	-3.72	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	789	*****	*****	*****	*****	0	*****			-	-								
SV	789	*****	*****	*****	*****	10.52	*****	-10.52	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	1,962	*****	*****	*****	*****	0	*****			-	-								
SV	2,190	*****	*****	*****	*****	2.83	*****	-2.83	*****										
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	1,846	*****	*****	*****	*****	2.69	*****			0.27 (0.02, 3.00)	0.287								
SV	1,053	*****	*****	*****	*****	10	*****	-7.3	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	201	*****	*****	*****	*****	0	*****			-	-								
SV	201	*****	*****	*****	*****	30.81	*****	-30.81	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	1,072	*****	*****	*****	*****	0	*****			-	-								
SV	1,015	*****	*****	*****	*****	10.37	*****	-10.37	*****										

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000		Difference in Rate per 1,000										
							New Users	Years	Risk per Person										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV	1,245	*****	*****	*****	*****	0	*****		0	*****	-								
SV	653	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	83	*****	*****	*****	*****	0	*****		0	*****	-								
SV	83	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	698	*****	*****	*****	*****	0	*****		0	*****	-								
SV	629	*****	*****	*****	*****	0	*****		0	*****	-								

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000		Difference in Rate per 1,000										
							Person	New Users	Person										
Race: Pacific Islander																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	66	*****	*****	*****	*****	52.19	*****				-								
SV	46	*****	*****	*****	*****	0	*****	52.19	*****		-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	32	*****	*****	*****	*****	0	*****				-								
SV	32	*****	*****	*****	*****	0	*****	0	*****		-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	32	*****	*****	*****	*****	0	*****				-								
SV	32	*****	*****	*****	*****	0	*****	0	*****		-								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV	66	*****	*****	*****	*****	0	*****				-								
SV	46	*****	*****	*****	*****	0	*****	0	*****		-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	32	*****	*****	*****	*****	0	*****				-								
SV	32	*****	*****	*****	*****	0	*****	0	*****		-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	32	*****	*****	*****	*****	0	*****				-								
SV	32	*****	*****	*****	*****	0	*****	0	*****		-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV	53	*****	*****	*****	*****	0	*****				-								
SV	42	*****	*****	*****	*****	0	*****	0	*****		-								

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000		Difference in Rate per 1,000		
							Person Years	New Users	Person Years		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	24	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	24	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	25	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	30	*****	*****	*****	*****	0	*****	0	*****	-	-
61 - 90 Days											
Site-Adjusted Analysis											
ACEI-SV	36	*****	*****	*****	*****	370.37	*****	370.37	*****	-	-
SV	28	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	11	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	11	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	15	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	19	*****	*****	*****	*****	0	*****	0	*****	-	-
91 - 180 Days											
Site-Adjusted Analysis											
ACEI-SV	31	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	24	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	12	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	17	*****	*****	*****	*****	0	*****	0	*****	-	-

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per 1,000 Person Years	Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 New Users											
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	16	*****	*****	*****	*****	0	*****			-	-								
SV	15	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV		*****	*****	*****	*****	0	*****			-	-								
SV		*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV		*****	*****	*****	*****	0	*****			-	-								
SV		*****	*****	*****	*****	0	*****	0	*****										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV		*****	*****	*****	*****	0	*****			-	-								
SV		*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV		*****	*****	*****	*****	0	*****			-	-								
SV		*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV		*****	*****	*****	*****	0	*****			-	-								
SV		*****	*****	*****	*****	0	*****	0	*****										
Race: White																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV	47,623	*****	*****	*****	*****	1.79	*****												
SV	29,504	*****	*****	*****	*****	1.11	*****	0.68	*****	1.62 (0.83, 3.16)	0.155								

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years		
							1,000 Person Years	Risk per New Users	Risk per 1,000 Person Years		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	28,510	*****	*****	*****	*****	2.78	*****				
SV	28,510	*****	*****	*****	*****	0.93	*****	1.85	*****	3.00 (1.09, 8.25)	0.033
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	28,510	*****	*****	*****	*****	2	*****				
SV	28,510	*****	*****	*****	*****	1.15	*****	0.86	*****	1.74 (0.85, 3.56)	0.129
0 - 30 Days											
Site-Adjusted Analysis											
ACEI-SV	47,623	*****	*****	*****	*****	2.52	*****				
SV	29,504	*****	*****	*****	*****	1.28	*****	1.24	*****	1.98 (0.54, 7.32)	0.305
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	28,510	*****	*****	*****	*****	3.39	*****				
SV	28,510	*****	*****	*****	*****	1.45	*****	1.93	*****	2.33 (0.60, 9.02)	0.22
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	28,510	*****	*****	*****	*****	3.28	*****				
SV	28,510	*****	*****	*****	*****	1.32	*****	1.96	*****	2.48 (0.64, 9.58)	0.189
31 - 60 Days											
Site-Adjusted Analysis											
ACEI-SV	38,957	*****	*****	*****	*****	1.88	*****				
SV	26,919	*****	*****	*****	*****	1.65	*****	0.23	*****	1.13 (0.27, 4.75)	0.863
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV	21,212	*****	*****	*****	*****	2.45	*****				
SV	21,212	*****	*****	*****	*****	1.63	*****	0.82	*****	1.50 (0.25, 8.98)	0.657
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV	23,154	*****	*****	*****	*****	1.9	*****				
SV	26,064	*****	*****	*****	*****	1.7	*****	0.2	*****	1.10 (0.22, 5.46)	0.906

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 Person Years		Difference in Risk per 1,000 Person Years										
							Incidence Rate per 1,000 New Users	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV	26,664	*****	*****	*****	*****	2.51	*****												
SV	17,919	*****	*****	*****	*****	1.48	*****	1.02	*****	1.69 (0.33, 8.72)	0.53								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	9,627	*****	*****	*****	*****	1.51	*****												
SV	9,627	*****	*****	*****	*****	0	*****	1.51	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	15,760	*****	*****	*****	*****	1.7	*****												
SV	17,368	*****	*****	*****	*****	1.53	*****	0.18	*****	1.11 (0.16, 7.88)	0.917								
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV	21,696	*****	*****	*****	*****	0.48	*****												
SV	14,724	*****	*****	*****	*****	1.15	*****	-0.67	*****	0.42 (0.07, 2.53)	0.347								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	6,407	*****	*****	*****	*****	2.22	*****												
SV	6,407	*****	*****	*****	*****	0	*****	2.22	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	12,722	*****	*****	*****	*****	0.84	*****												
SV	14,288	*****	*****	*****	*****	1.18	*****	-0.34	*****	0.71 (0.12, 4.24)	0.706								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV	13,667	*****	*****	*****	*****	2.14	*****												
SV	8,126	*****	*****	*****	*****	0	*****	2.14	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	2,209	*****	*****	*****	*****	0	*****												
SV	2,209	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	7,751	*****	*****	*****	*****	1.92	*****												
SV	7,921	*****	*****	*****	*****	0	*****	1.92	*****	-	-								

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

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000		Difference in Rate per 1,000										
							New Users	Years	Person										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV	9,609	*****	*****	*****	*****	1.88	*****												
SV	5,092	*****	*****	*****	*****	0.93	*****	0.95	*****	1.97 (0.22, 17.64)	0.544								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV	989	*****	*****	*****	*****	10.84	*****												
SV	989	*****	*****	*****	*****	0	*****	10.84	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV	5,248	*****	*****	*****	*****	2.63	*****												
SV	4,991	*****	*****	*****	*****	0.94	*****	1.69	*****	2.71 (0.28, 26.10)	0.387								

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Rate per 1,000 Person Years	Risk per 1,000 New Users	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹										
						Incidence Rate per 1,000	Difference in Risk per 1,000															
						Person Years	New Users															
Overall																						
Site-Adjusted Analysis																						
ARB-SV	48,455	*****	*****	*****	*****	2.62	*****		1.33	*****	2.10 (1.24, 3.57)	0.006										
SV	43,845	*****	*****	*****	*****	1.28	*****															
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ARB-SV	37,893	*****	*****	*****	*****	4.02	*****		2.44	*****	2.55 (1.27, 5.11)	0.009										
SV	37,893	*****	*****	*****	*****	1.58	*****															
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ARB-SV	37,893	*****	*****	*****	*****	2.76	*****		1.38	*****	2.03 (1.16, 3.54)	0.013										
SV	37,893	*****	*****	*****	*****	1.38	*****															
0 - 30 Days																						
Site-Adjusted Analysis																						
ARB-SV	48,455	*****	*****	*****	*****	3.88	*****		2.73	*****	3.36 (1.11, 10.22)	0.033										
SV	43,845	*****	*****	*****	*****	1.15	*****															
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ARB-SV	37,893	*****	*****	*****	*****	4.03	*****		2.56	*****	2.75 (0.88, 8.64)	0.083										
SV	37,893	*****	*****	*****	*****	1.46	*****															
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ARB-SV	37,893	*****	*****	*****	*****	3.9	*****		2.57	*****	2.93 (0.93, 9.20)	0.066										
SV	37,893	*****	*****	*****	*****	1.33	*****															
31 - 60 Days																						
Site-Adjusted Analysis																						
ARB-SV	38,929	*****	*****	*****	*****	3.02	*****		1.53	*****	2.00 (0.60, 6.65)	0.257										
SV	39,911	*****	*****	*****	*****	1.49	*****															
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ARB-SV	27,896	*****	*****	*****	*****	4.38	*****		2.5	*****	2.33 (0.60, 9.02)	0.22										
SV	27,896	*****	*****	*****	*****	1.88	*****															
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ARB-SV	30,495	*****	*****	*****	*****	3.38	*****		1.66	*****	1.97 (0.58, 6.72)	0.281										
SV	34,703	*****	*****	*****	*****	1.71	*****															

Table 8. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
									Rate per 1,000 New Users										
							Difference in Person Years	Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV	26,362	*****	*****	*****	*****	3.57	*****	1.53	*****	1.79 (0.52, 6.14)	0.354								
SV	26,165	*****	*****	*****	*****	2.04	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	12,369	*****	*****	*****	*****	7.11	*****												
SV	12,369	*****	*****	*****	*****	2.37	*****	4.74	*****	3.00 (0.61, 14.86)	0.178								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	20,601	*****	*****	*****	*****	3.92	*****												
SV	22,846	*****	*****	*****	*****	2.33	*****	1.59	*****	1.71 (0.48, 6.07)	0.405								
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV	21,280	*****	*****	*****	*****	2.24	*****												
SV	21,227	*****	*****	*****	*****	1.61	*****	0.63	*****	1.43 (0.51, 4.05)	0.496								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	8,114	*****	*****	*****	*****	2.66	*****												
SV	8,114	*****	*****	*****	*****	1.77	*****	0.89	*****	1.50 (0.25, 8.98)	0.657								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	16,557	*****	*****	*****	*****	2.25	*****												
SV	18,643	*****	*****	*****	*****	1.52	*****	0.73	*****	1.46 (0.46, 4.60)	0.518								
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	13,053	*****	*****	*****	*****	1.51	*****												
SV	11,473	*****	*****	*****	*****	0.45	*****	1.06	*****	3.25 (0.36, 29.12)	0.291								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	2,718	*****	*****	*****	*****	2.24	*****												
SV	2,718	*****	*****	*****	*****	0	*****	2.24	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	10,071	*****	*****	*****	*****	1.97	*****												
SV	10,185	*****	*****	*****	*****	0.5	*****	1.47	*****	3.89 (0.43, 34.76)	0.225								

Table 8. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Rate per Person New Users	Difference in Risk per Person New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹									
						Rate per 1,000 Person Years	Difference per 1,000 New Users Years													
						Incidence Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users Years													
271 - 365 Days																				
Site-Adjusted Analysis																				
ARB-SV	8,961	*****	*****	*****	*****	1.03	*****	0.37	*****	1.50 (0.14, 16.58)	0.739									
SV	7,184	*****	*****	*****	*****	0.66	*****													
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ARB-SV	1,204	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	1,204	*****	*****	*****	*****	0	*****													
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ARB-SV	6,844	*****	*****	*****	*****	0.68	*****	-0.05	*****	0.92 (0.06, 14.79)	0.956									
SV	6,480	*****	*****	*****	*****	0.72	*****													

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 9. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

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 Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 Person Years											
No Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV	48,399	*****	*****	*****	*****	2.26	*****												
SV	43,786	*****	*****	*****	*****	1.03	*****	1.23	*****	2.26 (1.26, 4.05)	0.006								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	37,832	*****	*****	*****	*****	3.3	*****												
SV	37,832	*****	*****	*****	*****	1.29	*****	2.01	*****	2.56 (1.18, 5.52)	0.017								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	37,832	*****	*****	*****	*****	2.38	*****												
SV	37,832	*****	*****	*****	*****	1.1	*****	1.29	*****	2.20 (1.19, 4.08)	0.012								
0 - 30 Days																			
Site-Adjusted Analysis																			
ARB-SV	48,399	*****	*****	*****	*****	2.5	*****												
SV	43,786	*****	*****	*****	*****	0.58	*****	1.92	*****	4.39 (0.95, 20.33)	0.059								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	37,832	*****	*****	*****	*****	2.57	*****												
SV	37,832	*****	*****	*****	*****	0.73	*****	1.83	*****	3.50 (0.73, 16.85)	0.118								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	37,832	*****	*****	*****	*****	2.48	*****												
SV	37,832	*****	*****	*****	*****	0.67	*****	1.82	*****	3.76 (0.78, 18.09)	0.099								
31 - 60 Days																			
Site-Adjusted Analysis																			
ARB-SV	38,888	*****	*****	*****	*****	3.02	*****												
SV	39,859	*****	*****	*****	*****	1.49	*****	1.53	*****	2.00 (0.60, 6.65)	0.257								

Table 9. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

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	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users		Difference in Risk per 1,000 New Users		
							Rate per 1,000 Person Years	Risk per 1,000 New Users			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	27,861	*****	*****	*****	*****	4.38	*****				
SV	27,861	*****	*****	*****	*****	1.88	*****	2.5	*****	2.33 (0.60, 9.02)	0.22
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	30,449	*****	*****	*****	*****	3.38	*****				
SV	34,650	*****	*****	*****	*****	1.71	*****	1.67	*****	1.97 (0.58, 6.72)	0.281
61 - 90 Days											
Site-Adjusted Analysis											
ARB-SV	26,334	*****	*****	*****	*****	3.06	*****				
SV	26,128	*****	*****	*****	*****	1.53	*****	1.53	*****	1.96 (0.49, 7.85)	0.34
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	12,358	*****	*****	*****	*****	5.94	*****				
SV	12,358	*****	*****	*****	*****	2.37	*****	3.56	*****	2.50 (0.49, 12.89)	0.273
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	20,567	*****	*****	*****	*****	3.28	*****				
SV	22,808	*****	*****	*****	*****	1.75	*****	1.53	*****	1.85 (0.44, 7.73)	0.401
91 - 180 Days											
Site-Adjusted Analysis											
ARB-SV	21,256	*****	*****	*****	*****	2.25	*****				
SV	21,197	*****	*****	*****	*****	1.34	*****	0.9	*****	1.73 (0.58, 5.20)	0.326
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	8,097	*****	*****	*****	*****	2.66	*****				
SV	8,097	*****	*****	*****	*****	1.78	*****	0.89	*****	1.50 (0.25, 8.98)	0.657
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	16,526	*****	*****	*****	*****	2.26	*****				
SV	18,613	*****	*****	*****	*****	1.22	*****	1.04	*****	1.83 (0.54, 6.25)	0.336

Table 9. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

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	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 New Users											
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	13,041	*****	*****	*****	*****	1.51	*****												
SV	11,456	*****	*****	*****	*****	0.45	*****	1.06	*****	3.25 (0.36, 29.11)	0.291								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	2,716	*****	*****	*****	*****	2.24	*****												
SV	2,716	*****	*****	*****	*****	0	*****	2.24	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	10,057	*****	*****	*****	*****	1.97	*****												
SV	10,168	*****	*****	*****	*****	0.5	*****	1.47	*****	3.88 (0.43, 34.76)	0.225								
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV	8,952	*****	*****	*****	*****	1.03	*****												
SV	7,173	*****	*****	*****	*****	0.66	*****	0.37	*****	1.50 (0.14, 16.57)	0.74								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	1,209	*****	*****	*****	*****	0	*****												
SV	1,209	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	6,834	*****	*****	*****	*****	0.68	*****												
SV	6,468	*****	*****	*****	*****	0.72	*****	-0.05	*****	0.92 (0.06, 14.78)	0.956								
Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV	56	*****	*****	*****	*****	333.33	*****												
SV	59	*****	*****	*****	*****	177.15	*****	156.19	*****	1.64 (0.46, 5.84)	0.444								

Table 9. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

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	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users Years		Difference in Risk per 1,000 New Users		
							Rate per 1,000 Person Years	Risk per 1,000 New Users			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	36	*****	*****	*****	*****	663.35	*****				
SV	36	*****	*****	*****	*****	331.67	*****	331.67	*****	2.00 (0.37, 10.92)	0.423
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	36	*****	*****	*****	*****	368.32	*****				
SV	36	*****	*****	*****	*****	292.61	*****	75.71	*****	1.09 (0.27, 4.35)	0.907
0 - 30 Days											
Site-Adjusted Analysis											
ARB-SV	56	*****	*****	*****	*****	1,253.13	*****				
SV	59	*****	*****	*****	*****	428.27	*****	824.87	*****	2.84 (0.55, 14.73)	0.213
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	36	*****	*****	*****	*****	1,666.67	*****				
SV	36	*****	*****	*****	*****	833.33	*****	833.33	*****	2.00 (0.37, 10.92)	0.423
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	36	*****	*****	*****	*****	1,593.63	*****				
SV	36	*****	*****	*****	*****	701.75	*****	891.87	*****	2.22 (0.41, 12.15)	0.357
31 - 60 Days											
Site-Adjusted Analysis											
ARB-SV	44	*****	*****	*****	*****	0	*****			-	-
SV	54	*****	*****	*****	*****	0	*****	0	*****		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	23	*****	*****	*****	*****	0	*****			-	-
SV	23	*****	*****	*****	*****	0	*****	0	*****		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	27	*****	*****	*****	*****	0	*****			-	-
SV	32	*****	*****	*****	*****	0	*****	0	*****		

Table 9. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

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	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 New Users											
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV	31	*****	*****	*****	*****	413.22	*****												
SV	41	*****	*****	*****	*****	328.95	*****	84.28	*****	1.05 (0.07, 16.78)	0.973								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	11	*****	*****	*****	*****	0	*****												
SV	11	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	18	*****	*****	*****	*****	0	*****												
SV	24	*****	*****	*****	*****	571.43	*****	-571.43	*****	-	-								
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV	27	*****	*****	*****	*****	0	*****												
SV	34	*****	*****	*****	*****	155.52	*****	-155.52	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	*****	*****	*****	*****	*****	0	*****												
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	17	*****	*****	*****	*****	0	*****												
SV	19	*****	*****	*****	*****	280.9	*****	-280.9	*****	-	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	13	*****	*****	*****	*****	0	*****												
SV	21	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 9. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, 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 Risk Window

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 Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users		Difference in Risk per 1,000 Person Years		
							1,000 Person	Risk per 1,000 New Users	Risk per 1,000 Person		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	11	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	11	*****	*****	*****	*****	0	*****	0	*****	-	-
271 - 365 Days											
Site-Adjusted Analysis											
ARB-SV	11	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	14	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Person Years	Incidence		Rate per 1,000 New Users	Risk per Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹											
							Average Person	Average Person																
							Number of Events	Number of Events																
Race: Unknown																								
Overall																								
Site-Adjusted Analysis																								
ARB-SV	7,859	*****	*****	*****	*****			1.51	*****															
SV	7,214	*****	*****	*****	*****			0.75	*****	0.75	*****	2.31 (0.41, 12.85)	0.34											
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ARB-SV	5,722	*****	*****	*****	*****			1.91	*****															
SV	5,722	*****	*****	*****	*****			0	*****	1.91	*****	-	-											
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ARB-SV	5,722	*****	*****	*****	*****			1.03	*****															
SV	5,722	*****	*****	*****	*****			0.46	*****	0.57	*****	2.43 (0.22, 26.98)	0.469											
0 - 30 Days																								
Site-Adjusted Analysis																								
ARB-SV	7,859	*****	*****	*****	*****			3.5	*****			-	-											
SV	7,214	*****	*****	*****	*****			0	*****	3.5	*****	-	-											
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																								
ARB-SV	5,722	*****	*****	*****	*****			2.49	*****			-	-											
SV	5,722	*****	*****	*****	*****			0	*****	2.49	*****	-	-											
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																								
ARB-SV	5,722	*****	*****	*****	*****			2.4	*****			-	-											
SV	5,722	*****	*****	*****	*****			0	*****	2.4	*****	-	-											
31 - 60 Days																								
Site-Adjusted Analysis																								
ARB-SV	6,039	*****	*****	*****	*****			0	*****			-	-											
SV	6,505	*****	*****	*****	*****			0	*****	0	*****	-	-											

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate per Person Years	Difference in Risk per Person 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							1,000	Risk per 1,000 New Users				
							Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV	4,004	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	4,004	*****	*****	*****	*****	0	*****		0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV	4,398	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	5,207	*****	*****	*****	*****	0	*****		0	*****	-	-
61 - 90 Days												
Site-Adjusted Analysis												
ARB-SV	4,107	*****	*****	*****	*****	3.29	*****		0.24	*****	1.11 (0.07, 18.45)	0.943
SV	4,385	*****	*****	*****	*****	3.05	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV	1,829	*****	*****	*****	*****	8.04	*****		8.04	*****	-	-
SV	1,829	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV	3,001	*****	*****	*****	*****	4.5	*****		0.72	*****	1.32 (0.08, 21.19)	0.845
SV	3,524	*****	*****	*****	*****	3.77	*****					
91 - 180 Days												
Site-Adjusted Analysis												
ARB-SV	3,285	*****	*****	*****	*****	1.57	*****		0.02	*****	1.51 (0.09, 24.24)	0.769
SV	3,544	*****	*****	*****	*****	1.55	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV	1,203	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	1,203	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV	2,412	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	2,870	*****	*****	*****	*****	0	*****					

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per 1,000 New Users	Rate in per 1,000 Person Years										
							1,000	Risk per 1,000 New Users	Difference										
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	2,082	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	2,021	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	448	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	448	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	1,531	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	1,666	*****	*****	*****	*****	0	*****	0	*****										
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV	1,422	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	1,284	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	208	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	208	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	1,039	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	1,075	*****	*****	*****	*****	0	*****	0	*****										
Race: American Indian																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV	128	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	144	*****	*****	*****	*****	0	*****	0	*****										

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate per Person	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							1,000	Risk per 1,000 New Users				
							Years	Years				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
0 - 30 Days												
Site-Adjusted Analysis												
ARB-SV	128	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	144	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	95	*****	*****	*****	*****	0	*****	0	*****	-	-	-
31 - 60 Days												
Site-Adjusted Analysis												
ARB-SV	99	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	128	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV	66	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	66	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV	73	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	85	*****	*****	*****	*****	0	*****	0	*****	-	-	-

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000 Person Years	Risk per 1,000 New Users	Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV	63	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	86	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	33	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	33	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	51	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	57	*****	*****	*****	*****	0	*****	0	*****	-	-								
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV	54	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	66	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	25	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	25	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	45	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	49	*****	*****	*****	*****	0	*****	0	*****	-	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	34	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	32	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	28	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	26	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate per Person Years	Difference in Risk per Person 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹										
							1,000	Risk per 1,000 New Users														
							Person Years	New Users														
271 - 365 Days																						
Site-Adjusted Analysis																						
ARB-SV	23	*****	*****	*****	*****	0	*****		0	*****	-	-										
SV	18	*****	*****	*****	*****	0	*****		0	*****	-	-										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ARB-SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-										
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ARB-SV	18	*****	*****	*****	*****	0	*****		0	*****	-	-										
SV	14	*****	*****	*****	*****	0	*****		0	*****	-	-										
Race: Asian																						
Overall																						
Site-Adjusted Analysis																						
ARB-SV	1,055	*****	*****	*****	*****	2.92	*****		2.92	*****	-	-										
SV	525	*****	*****	*****	*****	0	*****		0	*****	-	-										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ARB-SV	475	*****	*****	*****	*****	11.79	*****		11.79	*****	-	-										
SV	475	*****	*****	*****	*****	0	*****		0	*****	-	-										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ARB-SV	475	*****	*****	*****	*****	6.44	*****		6.44	*****	-	-										
SV	475	*****	*****	*****	*****	0	*****		0	*****	-	-										

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate per Person Years	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹									
							1,000	Risk per 1,000 New Users												
							Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users												
0 - 30 Days																				
Site-Adjusted Analysis																				
ARB-SV	1,055	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	525	*****	*****	*****	*****	0	*****	0	*****											
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ARB-SV	475	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	475	*****	*****	*****	*****	0	*****	0	*****											
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ARB-SV	475	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	475	*****	*****	*****	*****	0	*****	0	*****											
31 - 60 Days																				
Site-Adjusted Analysis																				
ARB-SV	776	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	483	*****	*****	*****	*****	0	*****	0	*****											
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ARB-SV	328	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	328	*****	*****	*****	*****	0	*****	0	*****											
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ARB-SV	352	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	437	*****	*****	*****	*****	0	*****	0	*****											
61 - 90 Days																				
Site-Adjusted Analysis																				
ARB-SV	518	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	329	*****	*****	*****	*****	0	*****	0	*****											
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ARB-SV	147	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	147	*****	*****	*****	*****	0	*****	0	*****											
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ARB-SV	235	*****	*****	*****	*****	0	*****	0	*****	-	-									
SV	303	*****	*****	*****	*****	0	*****	0	*****											

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per 1,000 New Users	Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person Years	Risk per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹										
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV	413	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	254	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	92	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	92	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	187	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	236	*****	*****	*****	*****	0	*****	0	*****	-	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	272	*****	*****	*****	*****	18.14	*****	18.14	*****	-	-								
SV	138	*****	*****	*****	*****	0	*****	18.14	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	40	*****	*****	*****	*****	133.87	*****	133.87	*****	-	-								
SV	40	*****	*****	*****	*****	0	*****	133.87	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	131	*****	*****	*****	*****	39.49	*****	39.49	*****	-	-								
SV	129	*****	*****	*****	*****	0	*****	39.49	*****	-	-								
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV	184	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	88	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	21	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	21	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	79	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	83	*****	*****	*****	*****	0	*****	0	*****	-	-								
Race: Black																			

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Risk per 1,000 Person Years										
							1,000 Person Years	Risk per 1,000 New Users	Risk per 1,000 Person Years										
Overall																			
Site-Adjusted Analysis																			
ARB-SV	6,881	*****	*****	*****	*****	4.85	*****												
SV	5,888	*****	*****	*****	*****	3.44	*****	1.42	*****	1.42 (0.52, 3.93)	0.494								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	5,016	*****	*****	*****	*****	3.85	*****												
SV	5,016	*****	*****	*****	*****	2.57	*****	1.28	*****	1.50 (0.25, 8.98)	0.657								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	5,016	*****	*****	*****	*****	4.06	*****												
SV	5,016	*****	*****	*****	*****	3.3	*****	0.76	*****	1.26 (0.38, 4.12)	0.707								
0 - 30 Days																			
Site-Adjusted Analysis																			
ARB-SV	6,881	*****	*****	*****	*****	5.88	*****												
SV	5,888	*****	*****	*****	*****	2.14	*****	3.73	*****	2.62 (0.27, 25.23)	0.404								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	5,016	*****	*****	*****	*****	5.55	*****												
SV	5,016	*****	*****	*****	*****	2.77	*****	2.77	*****	2.00 (0.18, 22.06)	0.571								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	5,016	*****	*****	*****	*****	5.37	*****												
SV	5,016	*****	*****	*****	*****	2.51	*****	2.86	*****	2.09 (0.19, 23.03)	0.548								
31 - 60 Days																			
Site-Adjusted Analysis																			
ARB-SV	5,477	*****	*****	*****	*****	5.6	*****												
SV	5,357	*****	*****	*****	*****	2.93	*****	2.67	*****	1.96 (0.18, 21.58)	0.584								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	3,664	*****	*****	*****	*****	5.15	*****												
SV	3,664	*****	*****	*****	*****	0	*****	5.15	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	4,003	*****	*****	*****	*****	3.84	*****												
SV	4,589	*****	*****	*****	*****	3.41	*****	0.44	*****	1.13 (0.07, 18.12)	0.93								

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Rate per 1,000 Person Years										
							Incidence	Rate per 1,000 New Users	Difference in Rate per 1,000 Person Years										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV	3,358	*****	*****	*****	*****	8.17	*****	3.74	*****	1.80 (0.16, 19.84)	0.633								
SV	3,088	*****	*****	*****	*****	4.42	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	1,291	*****	*****	*****	*****	0	*****	-11.78	*****	-	-								
SV	1,291	*****	*****	*****	*****	11.78	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	2,443	*****	*****	*****	*****	5.65	*****	0.54	*****	1.12 (0.07, 17.90)	0.936								
SV	2,666	*****	*****	*****	*****	5.11	*****												
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV	2,565	*****	*****	*****	*****	2.18	*****	-3.16	*****	0.41 (0.04, 4.53)	0.468								
SV	2,339	*****	*****	*****	*****	5.34	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	748	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	748	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	1,838	*****	*****	*****	*****	3.09	*****	0.03	*****	1.01 (0.06, 16.15)	0.994								
SV	2,036	*****	*****	*****	*****	3.06	*****												
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	1,421	*****	*****	*****	*****	3.49	*****	-1.47	*****	0.73 (0.05, 11.69)	0.825								
SV	1,062	*****	*****	*****	*****	4.96	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	206	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	206	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	995	*****	*****	*****	*****	4.97	*****	-0.64	*****	0.94 (0.06, 14.99)	0.964								
SV	940	*****	*****	*****	*****	5.61	*****												
271 - 365 Days																			

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							1,000	Risk per 1,000 New Users				
							Person Years	Years				
Site-Adjusted Analysis												
ARB-SV	963	*****	*****	*****	*****	4.88	*****		4.88	*****	-	-
SV	655	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV	88	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	88	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV	672	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	575	*****	*****	*****	*****	0	*****					

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Person Years	Incidence		Rate per 1,000 New Users	Risk per Person Years	Difference in per 1,000 Person Years	Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹												
							Rate per 1,000	Difference																		
							1,000 Person Years	in																		
Race: Pacific Islander																										
Overall																										
Site-Adjusted Analysis																										
ARB-SV	59	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
SV	44	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																										
ARB-SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																										
ARB-SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
0 - 30 Days																										
Site-Adjusted Analysis																										
ARB-SV	59	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
SV	44	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																										
ARB-SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																										
ARB-SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
SV	34	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
31 - 60 Days																										
Site-Adjusted Analysis																										
ARB-SV	51	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												
SV	41	*****	*****	*****	*****	0	*****		0	*****	-	-	-	-												

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Person	Incidence				Rate		Difference		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
				Average Person Days	Average Years at Risk	Number of Events	Rate per Person Years	Rate per 1,000 New Users	Difference in Risk per Person Years	Risk per 1,000 New Users	1,000 New Users		
				1,000 Person Years	1,000 New Users Years	1,000 New Users	1,000 New Users Years	1,000 New Users Years	1,000 New Users Years	1,000 New Users	1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ARB-SV	28	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	28	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ARB-SV	29	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	33	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
61 - 90 Days													
Site-Adjusted Analysis													
ARB-SV	34	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	26	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ARB-SV	15	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	15	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ARB-SV	16	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	21	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
91 - 180 Days													
Site-Adjusted Analysis													
ARB-SV	23	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	23	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ARB-SV	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ARB-SV	11	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
SV	20	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							1,000	Risk per 1,000 New Users	Rate in per 1,000 Person Years										
							1,000	Risk per 1,000 New Users	Difference										
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	14	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	14	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	12	*****	*****	*****	*****	0	*****	0	*****	-	-								
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Race: White																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV	32,473	*****	*****	*****	*****	2.48	*****	1.38	*****	2.33 (1.19, 4.57)	0.014								
SV	30,030	*****	*****	*****	*****	1.1	*****												

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate per Person Years	Difference in Risk per Person 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹				
							Average	Number								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																
ARB-SV	25,922	*****	*****	*****	*****	4.44	*****									
SV	25,922	*****	*****	*****	*****	1.21	*****	3.23	*****	3.67 (1.49, 9.04)	0.005					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																
ARB-SV	25,922	*****	*****	*****	*****	2.93	*****									
SV	25,922	*****	*****	*****	*****	1.14	*****	1.78	*****	2.62 (1.30, 5.27)	0.007					
0 - 30 Days																
Site-Adjusted Analysis																
ARB-SV	32,473	*****	*****	*****	*****	3.7	*****									
SV	30,030	*****	*****	*****	*****	1.26	*****	2.44	*****	2.93 (0.79, 10.84)	0.106					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																
ARB-SV	25,922	*****	*****	*****	*****	4.25	*****									
SV	25,922	*****	*****	*****	*****	1.59	*****	2.66	*****	2.67 (0.71, 10.05)	0.147					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																
ARB-SV	25,922	*****	*****	*****	*****	4.12	*****									
SV	25,922	*****	*****	*****	*****	1.46	*****	2.66	*****	2.85 (0.76, 10.74)	0.122					
31 - 60 Days																
Site-Adjusted Analysis																
ARB-SV	26,489	*****	*****	*****	*****	3.3	*****									
SV	27,401	*****	*****	*****	*****	1.62	*****	1.68	*****	2.07 (0.52, 8.28)	0.304					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																
ARB-SV	19,386	*****	*****	*****	*****	5.31	*****									
SV	19,386	*****	*****	*****	*****	0.89	*****	4.43	*****	6.00 (0.72, 49.84)	0.097					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																
ARB-SV	21,150	*****	*****	*****	*****	4.14	*****									
SV	23,783	*****	*****	*****	*****	1.24	*****	2.9	*****	3.36 (0.68, 16.64)	0.138					

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Risk per 1,000 Person Years										
							1,000 New Users	Years	Risk per 1,000 New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV	18,288	*****	*****	*****	*****	2.93	*****												
SV	18,258	*****	*****	*****	*****	1.45	*****	1.47	*****	2.02 (0.37, 11.04)	0.417								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	8,987	*****	*****	*****	*****	6.46	*****												
SV	8,987	*****	*****	*****	*****	1.62	*****	4.85	*****	4.00 (0.45, 35.79)	0.215								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	14,548	*****	*****	*****	*****	3.69	*****												
SV	15,922	*****	*****	*****	*****	1.66	*****	2.03	*****	2.21 (0.40, 12.06)	0.36								
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV	14,942	*****	*****	*****	*****	2.48	*****												
SV	15,009	*****	*****	*****	*****	1.13	*****	1.35	*****	2.15 (0.56, 8.30)	0.268								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	6,020	*****	*****	*****	*****	4.81	*****												
SV	6,020	*****	*****	*****	*****	0	*****	4.81	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	11,819	*****	*****	*****	*****	2.7	*****												
SV	13,166	*****	*****	*****	*****	1.29	*****	1.41	*****	2.09 (0.52, 8.35)	0.298								
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV	9,236	*****	*****	*****	*****	1.07	*****												
SV	8,209	*****	*****	*****	*****	0	*****	1.07	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV	2,003	*****	*****	*****	*****	0	*****												
SV	2,003	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV	7,240	*****	*****	*****	*****	1.37	*****												
SV	7,263	*****	*****	*****	*****	0	*****	1.37	*****	-	-								

Table 10. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹										
							1,000	Risk per 1,000 New Users														
							Person Years	Years														
271 - 365 Days																						
Site-Adjusted Analysis																						
ARB-SV	6,365	*****	*****	*****	*****	0.72	*****		-0.2	*****	0.78 (0.05, 12.55)	0.864										
SV	5,135	*****	*****	*****	*****	0.92	*****															
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																						
ARB-SV	899	*****	*****	*****	*****	0	*****		-6.08	*****	-	-										
SV	899	*****	*****	*****	*****	6.08	*****															
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																						
ARB-SV	4,940	*****	*****	*****	*****	0.94	*****		-0.08	*****	0.92 (0.06, 14.75)	0.955										
SV	4,627	*****	*****	*****	*****	1.01	*****															

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 11. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Risk per 1,000 Person Years										
							Rate per 1,000 New Users	Difference in Risk per 1,000 Person Years	New Users										
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,920	*****	*****	*****	*****	2.44	*****	-0.84	*****	0.75 (0.48, 1.17)	0.208								
ARB-SV 14-day	35,084	*****	*****	*****	*****	3.28	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	33,383	*****	*****	*****	*****	3.78	*****	-0.94	*****	0.80 (0.44, 1.44)	0.457								
ARB-SV 14-day	33,383	*****	*****	*****	*****	4.72	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	33,383	*****	*****	*****	*****	2.63	*****	-0.61	*****	0.81 (0.50, 1.33)	0.405								
ARB-SV 14-day	33,383	*****	*****	*****	*****	3.24	*****												
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,920	*****	*****	*****	*****	3.94	*****	-1.17	*****	0.77 (0.36, 1.64)	0.495								
ARB-SV 14-day	35,084	*****	*****	*****	*****	5.11	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	33,383	*****	*****	*****	*****	5.1	*****	-0.46	*****	0.92 (0.40, 2.08)	0.835								
ARB-SV 14-day	33,383	*****	*****	*****	*****	5.57	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	33,383	*****	*****	*****	*****	5.38	*****	0.43	*****	1.09 (0.50, 2.38)	0.835								
ARB-SV 14-day	33,383	*****	*****	*****	*****	4.94	*****												
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	37,299	*****	*****	*****	*****	3.96	*****	0.09	*****	1.03 (0.39, 2.70)	0.954								
ARB-SV 14-day	26,670	*****	*****	*****	*****	3.87	*****												

Table 11. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users		Difference in Risk per 1,000 New Users		
							Rate per 1,000 Person Years	Difference per 1,000 Person Years			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	19,392	*****	*****	*****	*****	3.59	*****				
ARB-SV 14-day	19,392	*****	*****	*****	*****	4.49	*****	-0.9	*****	0.80 (0.21, 2.98)	0.739
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	25,261	*****	*****	*****	*****	3.5	*****	0.05	*****	1.01 (0.33, 3.14)	0.985
ARB-SV 14-day	25,535	*****	*****	*****	*****	3.46	*****				
61 - 90 Days											
Site-Adjusted Analysis											
ACEI-SV 14-day	25,081	*****	*****	*****	*****	2.7	*****				
ARB-SV 14-day	17,938	*****	*****	*****	*****	3.78	*****	-1.08	*****	0.72 (0.21, 2.47)	0.597
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	8,804	*****	*****	*****	*****	0	*****				
ARB-SV 14-day	8,804	*****	*****	*****	*****	3.41	*****	-3.41	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	16,973	*****	*****	*****	*****	1.6	*****				
ARB-SV 14-day	17,220	*****	*****	*****	*****	3.93	*****	-2.33	*****	0.41 (0.08, 2.10)	0.282
91 - 180 Days											
Site-Adjusted Analysis											
ACEI-SV 14-day	19,871	*****	*****	*****	*****	0.78	*****				
ARB-SV 14-day	14,260	*****	*****	*****	*****	2.57	*****	-1.79	*****	0.31 (0.08, 1.18)	0.086
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	5,539	*****	*****	*****	*****	2.38	*****				
ARB-SV 14-day	5,539	*****	*****	*****	*****	3.57	*****	-1.19	*****	0.67 (0.11, 3.99)	0.657
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	13,385	*****	*****	*****	*****	1.16	*****				
ARB-SV 14-day	13,703	*****	*****	*****	*****	2.67	*****	-1.51	*****	0.43 (0.11, 1.67)	0.224
181 - 270 Days											
Site-Adjusted Analysis											
ACEI-SV 14-day	12,720	*****	*****	*****	*****	1.91	*****				
ARB-SV 14-day	8,967	*****	*****	*****	*****	2.19	*****	-0.28	*****	0.90 (0.24, 3.35)	0.875

Table 11. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

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		Difference		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
						Rate per Person	Rate per 1,000 New Users	Difference per 1,000 Person	Risk per 1,000 New Users				
						1,000 Person Years	Years	Person	1,000				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	2,226	*****	*****	*****	*****	7.77	*****			0	*****	1.00 (0.20, 4.95)	1
ARB-SV 14-day	2,226	*****	*****	*****	*****	7.77	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	8,531	*****	*****	*****	*****	2.86	*****			0.59	*****	1.27 (0.34, 4.72)	0.724
ARB-SV 14-day	8,631	*****	*****	*****	*****	2.27	*****						
271 - 365 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	9,007	*****	*****	*****	*****	1.5	*****			0.03	*****	1.03 (0.17, 6.15)	0.977
ARB-SV 14-day	6,248	*****	*****	*****	*****	1.47	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	1,131	*****	*****	*****	*****	0	*****			0	*****	-	-
ARB-SV 14-day	1,131	*****	*****	*****	*****	0	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	5,967	*****	*****	*****	*****	0	*****			-1.53	*****	-	-
ARB-SV 14-day	6,021	*****	*****	*****	*****	1.53	*****						

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 12. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Number of Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Difference in Risk per Person Years										
							Average Number of Events	Rate per 1,000 New Users	Risk per Person Years										
No Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,874	*****	*****	*****	*****	2.38	*****	-0.56	*****	0.82 (0.52, 1.30)	0.393								
ARB-SV 14-day	35,051	*****	*****	*****	*****	2.94	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	33,350	*****	*****	*****	*****	3.78	*****	-0.38	*****	0.91 (0.50, 1.67)	0.758								
ARB-SV 14-day	33,350	*****	*****	*****	*****	4.16	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	33,350	*****	*****	*****	*****	2.63	*****	-0.34	*****	0.89 (0.54, 1.46)	0.637								
ARB-SV 14-day	33,350	*****	*****	*****	*****	2.97	*****												
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,874	*****	*****	*****	*****	3.94	*****	0.4	*****	1.11 (0.48, 2.56)	0.811								
ARB-SV 14-day	35,051	*****	*****	*****	*****	3.54	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	33,350	*****	*****	*****	*****	5.11	*****	0.93	*****	1.22 (0.51, 2.95)	0.655								
ARB-SV 14-day	33,350	*****	*****	*****	*****	4.18	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	33,350	*****	*****	*****	*****	5.38	*****	1.67	*****	1.45 (0.62, 3.39)	0.391								
ARB-SV 14-day	33,350	*****	*****	*****	*****	3.71	*****												
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	37,263	*****	*****	*****	*****	3.56	*****	-0.31	*****	0.92 (0.34, 2.48)	0.877								
ARB-SV 14-day	26,649	*****	*****	*****	*****	3.87	*****												

Table 12. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years		Incidence Rate per 1,000 Person Years		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
						Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 New Users Years					
						Average Person	Average Person	Risk per Person	Risk per New Users				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	19,382	*****	*****	*****	*****	3.59	*****	-0.9	*****	0.80 (0.21, 2.98)	0.739		
ARB-SV 14-day	19,382	*****	*****	*****	*****	4.49	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	25,235	*****	*****	*****	*****	3.51	*****	0.05	*****	1.01 (0.33, 3.14)	0.984		
ARB-SV 14-day	25,514	*****	*****	*****	*****	3.46	*****						
61 - 90 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	25,060	*****	*****	*****	*****	2.7	*****	-1.08	*****	0.72 (0.21, 2.47)	0.597		
ARB-SV 14-day	17,924	*****	*****	*****	*****	3.78	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	8,797	*****	*****	*****	*****	0	*****	-3.41	*****	-	-		
ARB-SV 14-day	8,797	*****	*****	*****	*****	3.41	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	16,955	*****	*****	*****	*****	1.6	*****	-2.33	*****	0.41 (0.08, 2.10)	0.282		
ARB-SV 14-day	17,204	*****	*****	*****	*****	3.93	*****						
91 - 180 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	19,858	*****	*****	*****	*****	0.78	*****	-1.79	*****	0.31 (0.08, 1.18)	0.086		
ARB-SV 14-day	14,248	*****	*****	*****	*****	2.57	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	5,535	*****	*****	*****	*****	2.38	*****	-1.19	*****	0.67 (0.11, 3.99)	0.657		
ARB-SV 14-day	5,535	*****	*****	*****	*****	3.57	*****						

Table 12. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000		Incidence Rate per 1,000		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
						Incidence Rate per 1,000		Difference in Risk per 1,000					
						Person Years	New Users	Person Years	New Users				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	13,372	*****	*****	*****	*****	1.16	*****	-1.51	*****	0.43 (0.11, 1.67)	0.224		
ARB-SV 14-day	13,691	*****	*****	*****	*****	2.68	*****						
181 - 270 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	12,710	*****	*****	*****	*****	1.91	*****	-0.28	*****	0.90 (0.24, 3.35)	0.874		
ARB-SV 14-day	8,960	*****	*****	*****	*****	2.19	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	2,226	*****	*****	*****	*****	7.77	*****	0	*****	1.00 (0.20, 4.95)	1		
ARB-SV 14-day	2,226	*****	*****	*****	*****	7.77	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	8,522	*****	*****	*****	*****	2.86	*****	0.59	*****	1.27 (0.34, 4.72)	0.724		
ARB-SV 14-day	8,625	*****	*****	*****	*****	2.27	*****						
271 - 365 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	8,999	*****	*****	*****	*****	1.5	*****	0.03	*****	1.03 (0.17, 6.14)	0.978		
ARB-SV 14-day	6,241	*****	*****	*****	*****	1.47	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	1,133	*****	*****	*****	*****	0	*****	0	*****	-	-		
ARB-SV 14-day	1,133	*****	*****	*****	*****	0	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	5,962	*****	*****	*****	*****	0	*****	-1.53	*****	-	-		
ARB-SV 14-day	6,016	*****	*****	*****	*****	1.53	*****						

Table 12. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Rate per 1,000										
							Risk per Person	New Users	Risk per Person										
Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	46	*****	*****	*****	*****	77.34	*****	-313.29	*****	0.15 (0.02, 1.52)	0.109								
ARB-SV 14-day	33	*****	*****	*****	*****	390.63	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	20	*****	*****	*****	*****	0	*****	-436.68	*****	-	-								
ARB-SV 14-day	20	*****	*****	*****	*****	436.68	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	20	*****	*****	***	*****	0	*****	-145.56	*****	-	-								
ARB-SV 14-day	20	*****	*****	*****	*****	145.56	*****												
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	46	*****	*****	*****	*****	0	*****	-1851.85	*****	-	-								
ARB-SV 14-day	33	*****	*****	*****	*****	1,851.85	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	20	*****	*****	***	*****	0	*****	-746.27	*****	-	-								
ARB-SV 14-day	20	*****	*****	*****	*****	746.27	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	20	*****	*****	***	*****	0	*****	-729.93	*****	-	-								
ARB-SV 14-day	20	*****	*****	***	*****	729.93	*****												
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	38	*****	*****	***	*****	392.16	*****	392.16	*****	-	-								
ARB-SV 14-day	23	*****	*****	***	*****	0	*****												

Table 12. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person	Average Person	Incidence		Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹	
					Days at Risk	Years at Risk	Number of Events	Rate per Person Years	Rate per 1,000 New Users Years			
			Person	Person								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	15	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	15	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	17	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	16	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
61 - 90 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	26	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	14	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	11	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	11	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
91 - 180 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	18	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	12	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 12. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
						Average Person	Average Person	Rate per Person	Rate per 1,000	Difference in Risk per Person		
						Person	Days	Person	Years	New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
181 - 270 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	14	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
271 - 365 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	13	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-
ARB-SV 14-day	*****	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Person	Average		Number of Events	Rate per Person Years	Incidence		Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹				
				Days at Risk	Person			Average Person at Risk	Number of Events	Rate per 1,000 Person Years	Risk per New Users Years	Difference in Risk per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹					
				Years at Risk	Person	Events	1,000 Person Years	New Users	New Users	New Users Years	New Users	New Users						
Race: Unknown																		
Overall																		
Site-Adjusted Analysis																		
ACEI-SV 14-day	7,922	*****	*****	*****	*****	*****	1.58	*****		-0.13	*****	0.86 (0.19, 3.87)		0.848				
ARB-SV 14-day	5,604	*****	*****	*****	*****	*****	1.71	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																		
ACEI-SV 14-day	5,241	*****	*****	*****	*****	*****	2.57	*****		-1.29	*****	0.67 (0.11, 3.99)		0.657				
ARB-SV 14-day	5,241	*****	*****	*****	*****	*****	3.86	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																		
ACEI-SV 14-day	5,241	*****	*****	*****	*****	*****	1.21	*****		-0.6	*****	0.65 (0.11, 3.90)		0.638				
ARB-SV 14-day	5,241	*****	*****	*****	*****	*****	1.81	*****										
0 - 30 Days																		
Site-Adjusted Analysis																		
ACEI-SV 14-day	7,922	*****	*****	*****	*****	*****	1.79	*****		-3.29	*****	0.35 (0.03, 3.85)		0.388				
ARB-SV 14-day	5,604	*****	*****	*****	*****	*****	5.08	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																		
ACEI-SV 14-day	5,241	*****	*****	*****	*****	*****	3.13	*****		-3.13	*****	0.50 (0.05, 5.51)		0.571				
ARB-SV 14-day	5,241	*****	*****	*****	*****	*****	6.26	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																		
ACEI-SV 14-day	5,241	*****	*****	*****	*****	*****	2.72	*****		-2.69	*****	0.50 (0.05, 5.50)		0.57				
ARB-SV 14-day	5,241	*****	*****	*****	*****	*****	5.41	*****										
31 - 60 Days																		
Site-Adjusted Analysis																		
ACEI-SV 14-day	5,650	*****	*****	*****	*****	*****	2.59	*****		2.59	*****	-	-					
ARB-SV 14-day	3,986	*****	*****	*****	*****	*****	0	*****										

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Person	Average		Number of Events	Incidence Rate per 1,000 Person Years		Incidence Rate			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
				Days at Risk	Person		Number	1,000 Person Years	Risk per 1,000 New Users Years	Difference in Risk per 1,000 New Users			
				Events	Years		Person	Person	Person	Person			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	2,660	*****	*****	*****	*****	*****	6.42	*****	6.42	*****	-	-	-
ARB-SV 14-day	2,660	*****	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	3,695	*****	*****	*****	*****	*****	3.94	*****	3.94	*****	-	-	-
ARB-SV 14-day	3,758	*****	*****	*****	*****	*****	0	*****					
61 - 90 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	3,867	*****	*****	*****	*****	*****	3.52	*****	3.52	*****	-	-	-
ARB-SV 14-day	2,678	*****	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	1,257	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
ARB-SV 14-day	1,257	*****	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	2,538	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
ARB-SV 14-day	2,530	*****	*****	*****	*****	*****	0	*****					
91 - 180 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	3,028	*****	*****	*****	*****	*****	0	*****	-2.42	*****	-	-	-
ARB-SV 14-day	2,116	*****	*****	*****	*****	*****	2.42	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	794	*****	*****	*****	*****	*****	0	*****	-8.02	*****	-	-	-
ARB-SV 14-day	794	*****	*****	*****	*****	*****	8.02	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	1,969	*****	*****	*****	*****	*****	0	*****	-2.54	*****	-	-	-
ARB-SV 14-day	2,012	*****	*****	*****	*****	*****	2.54	*****					

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							Rate per 1,000 New Users	Years	Risk per 1,000 New Users										
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	1,954	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	1,357	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	341	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	341	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	1,268	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	1,290	*****	*****	*****	*****	0	*****				-								
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	1,381	*****	*****	*****	*****	3.25	*****		3.25	*****	-								
ARB-SV 14-day	933	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	186	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	186	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	896	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	885	*****	*****	*****	*****	0	*****				-								
Race: American Indian																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	160	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	82	*****	*****	*****	*****	0	*****				-								

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence Rate per 1,000		Difference in Risk per 1,000		
							Rate per 1,000 Person Years	New Users	Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
0 - 30 Days											
Site-Adjusted Analysis											
ACEI-SV 14-day	160	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	82	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	72	*****	*****	*****	*****	0	*****	0	*****	-	-
31 - 60 Days											
Site-Adjusted Analysis											
ACEI-SV 14-day	121	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	59	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	39	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	39	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	55	*****	*****	*****	*****	0	*****	0	*****	-	-
ARB-SV 14-day	51	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							Rate per 1,000 New Users	Years	Risk per 1,000 New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	77	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	34	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	17	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	17	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	34	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	28	*****	*****	*****	*****	0	*****				-								
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	61	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	31	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	13	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	13	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	26	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	27	*****	*****	*****	*****	0	*****				-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	38	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	16	*****	*****	*****	*****	0	*****				-								

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users				
							Average Person	Average Person						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	14	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	14	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
271 - 365 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	28	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	11	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	11	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Race: Asian														
Overall														
Site-Adjusted Analysis														
ACEI-SV 14-day	525	*****	*****	*****	*****	0	*****	-3.86	*****	-	-	-		
ARB-SV 14-day	847	*****	*****	*****	*****	3.86	*****		*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	455	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	455	*****	*****	*****	*****	0	*****	0	*****	-	-	-		

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence		Rate	Difference		
							Rate per 1,000 Person Years	Risk per 1,000 New Users	in Person Years	Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	455	*****	*****	*****	*****	0	*****				-	-
ARB-SV 14-day	455	*****	*****	*****	*****	6.89	*****	-6.89	*****			
0 - 30 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	525	*****	*****	*****	*****	0	*****		0	*****	-	-
ARB-SV 14-day	847	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	455	*****	*****	*****	*****	0	*****		0	*****	-	-
ARB-SV 14-day	455	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	455	*****	*****	*****	*****	0	*****		0	*****	-	-
ARB-SV 14-day	455	*****	*****	*****	*****	0	*****					
31 - 60 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	380	*****	*****	*****	*****	0	*****		0	*****	-	-
ARB-SV 14-day	587	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	247	*****	*****	*****	*****	0	*****		0	*****	-	-
ARB-SV 14-day	247	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	331	*****	*****	*****	*****	0	*****		0	*****	-	-
ARB-SV 14-day	329	*****	*****	*****	*****	0	*****					

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							Rate per 1,000 New Users	Years	Risk per 1,000 New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	260	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	392	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	116	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	116	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	228	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	223	*****	*****	*****	*****	0	*****				-								
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	195	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	309	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	74	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	74	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	174	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	180	*****	*****	*****	*****	0	*****				-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	135	*****	*****	*****	*****	0	*****		-24.17	*****	-								
ARB-SV 14-day	207	*****	*****	*****	*****	24.17	*****				-								

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users				
							Average Person	Average Person						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	34	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	34	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	119	*****	*****	*****	*****	0	*****				-	-		
ARB-SV 14-day	118	*****	*****	*****	*****	42.54	*****	-42.54	*****	-				
271 - 365 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	101	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	134	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	19	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	19	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	89	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	73	*****	*****	*****	*****	0	*****							
Race: Black														
Overall														
Site-Adjusted Analysis														
ACEI-SV 14-day	5,967	*****	*****	*****	*****	6.92	*****							
ARB-SV 14-day	4,736	*****	*****	*****	*****	5.14	*****	1.78	*****	1.36 (0.53, 3.45)	0.521			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	4,255	*****	*****	*****	*****	10.41	*****							
ARB-SV 14-day	4,255	*****	*****	*****	*****	3.47	*****	6.94	*****	3.00 (0.61, 14.86)	0.178			

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users				
							Average Person	Average Number						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	4,255	*****	*****	*****	*****	8.11	*****		4.05	*****	2.01 (0.69, 5.87)	0.204		
ARB-SV 14-day	4,255	*****	*****	*****	*****	4.06	*****							
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	5,967	*****	*****	*****	*****	13.97	*****		5.17	*****	1.61 (0.40, 6.44)	0.5		
ARB-SV 14-day	4,736	*****	*****	*****	*****	8.8	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	4,255	*****	*****	*****	*****	14.85	*****		7.42	*****	2.00 (0.37, 10.92)	0.423		
ARB-SV 14-day	4,255	*****	*****	*****	*****	7.42	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	4,255	*****	*****	*****	*****	16.4	*****		9.87	*****	2.51 (0.49, 12.92)	0.272		
ARB-SV 14-day	4,255	*****	*****	*****	*****	6.53	*****							
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	4,444	*****	*****	*****	*****	13.8	*****		9.48	*****	3.16 (0.35, 28.24)	0.304		
ARB-SV 14-day	3,528	*****	*****	*****	*****	4.32	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	2,355	*****	*****	*****	*****	7.7	*****		7.7	*****	-	-		
ARB-SV 14-day	2,355	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	3,150	*****	*****	*****	*****	14.5	*****		14.5	*****	-	-		
ARB-SV 14-day	3,171	*****	*****	*****	*****	0	*****							

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							Rate per 1,000 New Users	Difference in Risk per 1,000 New Users											
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	2,740	*****	*****	*****	*****	0	*****	-6.3	*****	-	-								
ARB-SV 14-day	2,194	*****	*****	*****	*****	6.3	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	960	*****	*****	*****	*****	0	*****	0	*****	-	-								
ARB-SV 14-day	960	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	1,978	*****	*****	*****	*****	0	*****	-6.97	*****	-	-								
ARB-SV 14-day	1,983	*****	*****	*****	*****	6.97	*****												
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	2,051	*****	*****	*****	*****	2.61	*****	2.61	*****	-	-								
ARB-SV 14-day	1,656	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	534	*****	*****	*****	*****	13.52	*****	13.52	*****	-	-								
ARB-SV 14-day	534	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	1,469	*****	*****	*****	*****	3.63	*****	3.63	*****	-	-								
ARB-SV 14-day	1,498	*****	*****	*****	*****	0	*****												
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	1,235	*****	*****	*****	*****	4	*****	-1.2	*****	0.76 (0.05, 12.15)	0.846								
ARB-SV 14-day	943	*****	*****	*****	*****	5.2	*****												

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Person	Average		Number of Events	Incidence		Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
				Days at Risk	Person		Rate per 1,000 Person	Rate per 1,000 New Users	Difference in Risk per Person				
				Events	Years at Risk		Years	Risk per 1,000 Years	Risk per 1,000 New Users				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	168	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
ARB-SV 14-day	168	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	890	*****	*****	*****	*****	*****	5.64	*****	-0.06	*****	0.99 (0.06, 15.82)	0.994	0.994
ARB-SV 14-day	860	*****	*****	*****	*****	*****	5.7	*****	0	*****	-	-	-
271 - 365 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	837	*****	*****	*****	*****	*****	0	*****	-7.12	*****	-	-	-
ARB-SV 14-day	658	*****	*****	*****	*****	*****	7.12	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	86	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
ARB-SV 14-day	86	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	584	*****	*****	*****	*****	*****	0	*****	-7.77	*****	-	-	-
ARB-SV 14-day	601	*****	*****	*****	*****	*****	7.77	*****	0	*****	-	-	-
Race: Pacific Islander													
Overall													
Site-Adjusted Analysis													
ACEI-SV 14-day	46	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
ARB-SV 14-day	45	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	35	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-
ARB-SV 14-day	35	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users				
							Average Person	Average Number of Events						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	35	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	35	*****	*****	*****	*****	0	*****		0	*****	-	-		
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	46	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	45	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	35	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	35	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	35	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	35	*****	*****	*****	*****	0	*****		0	*****	-	-		
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	33	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	37	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	21	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	21	*****	*****	*****	*****	0	*****		0	*****	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	25	*****	*****	*****	*****	0	*****		0	*****	-	-		
ARB-SV 14-day	29	*****	*****	*****	*****	0	*****		0	*****	-	-		

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							Rate per 1,000 New Users	Years	Risk per 1,000 New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	23	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	22	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	17	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	18	*****	*****	*****	*****	0	*****				-								
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	20	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	14	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	14	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	11	*****	*****	*****	*****	0	*****				-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	13	*****	*****	*****	*****	0	*****		0	*****	-								
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****				-								

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence		Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users				
							Average Person	Average Person						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
271 - 365 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-		
Race: White														
Overall														
Site-Adjusted Analysis														
ACEI-SV 14-day	34,300	*****	*****	*****	*****	2.02	*****	-1.28	*****	0.62 (0.36, 1.07)	0.084			
ARB-SV 14-day	23,770	*****	*****	*****	*****	3.3	*****	-	*****	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	22,933	*****	*****	*****	*****	3.12	*****	-1.3	*****	0.71 (0.34, 1.48)	0.356			
ARB-SV 14-day	22,933	*****	*****	*****	*****	4.43	*****	-	*****	-	-	-		

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
							Incidence Rate per 1,000 Person Years		Difference in Risk per Person Years	Risk per 1,000 New Users				
							Average Person	Average Number						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	22,933	*****	*****	*****	*****	2.17	*****		-1.11	*****	0.66 (0.36, 1.22)	0.183		
ARB-SV 14-day	22,933	*****	*****	*****	*****	3.28	*****							
0 - 30 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	34,300	*****	*****	*****	*****	2.78	*****		-1.81	*****	0.61 (0.22, 1.69)	0.342		
ARB-SV 14-day	23,770	*****	*****	*****	*****	4.59	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	22,933	*****	*****	*****	*****	4.64	*****		0	*****	1.00 (0.35, 2.85)	1		
ARB-SV 14-day	22,933	*****	*****	*****	*****	4.64	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	22,933	*****	*****	*****	*****	4.17	*****		0.01	*****	1.00 (0.35, 2.86)	0.994		
ARB-SV 14-day	22,933	*****	*****	*****	*****	4.16	*****							
31 - 60 Days														
Site-Adjusted Analysis														
ACEI-SV 14-day	26,674	*****	*****	*****	*****	2.75	*****		-2	*****	0.57 (0.17, 1.87)	0.354		
ARB-SV 14-day	18,475	*****	*****	*****	*****	4.76	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ACEI-SV 14-day	13,860	*****	*****	*****	*****	2.48	*****		-2.48	*****	0.50 (0.09, 2.73)	0.423		
ARB-SV 14-day	13,860	*****	*****	*****	*****	4.97	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ACEI-SV 14-day	17,726	*****	*****	*****	*****	1.66	*****		-3.25	*****	0.34 (0.07, 1.66)	0.181		
ARB-SV 14-day	17,896	*****	*****	*****	*****	4.91	*****							

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹									
							Incidence Rate per 1,000 Person		Difference in Risk per Person	Rate per 1,000 New Users											
							Rate per 1,000 Person	Risk per Person		Rate per 1,000 New Users											
61 - 90 Days																					
Site-Adjusted Analysis																					
ACEI-SV 14-day	18,122	*****	*****	*****	*****	2.98	*****	-1.3	*****	0.69 (0.17, 2.77)		0.601									
ARB-SV 14-day	12,620	*****	*****	*****	*****	4.28	*****														
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																					
ACEI-SV 14-day	6,482	*****	*****	*****	*****	2.3	*****	-2.3	*****	0.50 (0.05, 5.51)		0.571									
ARB-SV 14-day	6,482	*****	*****	*****	*****	4.59	*****														
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																					
ACEI-SV 14-day	12,007	*****	*****	*****	*****	2.25	*****	-2.16	*****	0.51 (0.09, 2.77)		0.433									
ARB-SV 14-day	12,247	*****	*****	*****	*****	4.41	*****														
91 - 180 Days																					
Site-Adjusted Analysis																					
ACEI-SV 14-day	14,521	*****	*****	*****	*****	0.71	*****	-2.38	*****	0.23 (0.05, 1.16)		0.076									
ARB-SV 14-day	10,137	*****	*****	*****	*****	3.09	*****														
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																					
ACEI-SV 14-day	4,171	*****	*****	*****	*****	0	*****	-4.74	*****	-		-									
ARB-SV 14-day	4,171	*****	*****	*****	*****	4.74	*****														
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																					
ACEI-SV 14-day	9,599	*****	*****	*****	*****	1.08	*****	-2.1	*****	0.34 (0.07, 1.69)		0.187									
ARB-SV 14-day	9,832	*****	*****	*****	*****	3.18	*****														
181 - 270 Days																					
Site-Adjusted Analysis																					
ACEI-SV 14-day	9,359	*****	*****	*****	*****	2.07	*****	0.55	*****	1.37 (0.25, 7.49)		0.715									
ARB-SV 14-day	6,444	*****	*****	*****	*****	1.52	*****														

Table 13. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Person	Average		Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹	
				Average Days at Risk	Person at Risk			Average Person Years at Risk	Number of Events	Rate per 1,000 Person Years	Difference in Rate per 1,000 Person Years		
				Person	Person			Person	Person	Risk per 1,000 Person Years	Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	1,693	*****	*****	*****	*****	*****	6.79	*****	*****	3.39	*****	2.00 (0.18, 22.06)	0.571
ARB-SV 14-day	1,693	*****	*****	*****	*****	*****	3.39	*****	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	6,156	*****	*****	*****	*****	*****	3.17	*****	*****	1.61	*****	2.01 (0.37, 10.97)	0.421
ARB-SV 14-day	6,269	*****	*****	*****	*****	*****	1.56	*****	*****	*****	*****	*****	
271 - 365 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	6,661	*****	*****	*****	*****	*****	1.35	*****	*****	0.33	*****	1.35 (0.12, 14.90)	0.806
ARB-SV 14-day	4,510	*****	*****	*****	*****	*****	1.02	*****	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	870	*****	*****	*****	*****	*****	0	*****	*****	0	*****	-	-
ARB-SV 14-day	870	*****	*****	*****	*****	*****	0	*****	*****	*****	*****	*****	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	4,321	*****	*****	*****	*****	*****	0	*****	*****	-1.04	*****	-	-
ARB-SV 14-day	4,396	*****	*****	*****	*****	*****	1.04	*****	*****	*****	*****	*****	

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person	Risk per 1,000 Years	New Users										
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,892	*****	*****	*****	*****	2.44	*****	1.1	*****	1.86 (1.09, 3.15)	0.022								
SV	44,050	*****	*****	*****	*****	1.34	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	38,268	*****	*****	*****	*****	3.4	*****	2.07	*****	2.56 (1.18, 5.52)	0.017								
SV	38,268	*****	*****	*****	*****	1.33	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	38,268	*****	*****	*****	*****	2.56	*****	1.26	*****	1.98 (1.11, 3.53)	0.02								
SV	38,268	*****	*****	*****	*****	1.3	*****												
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,892	*****	*****	*****	*****	3.94	*****	2.8	*****	3.40 (1.12, 10.34)	0.031								
SV	44,050	*****	*****	*****	*****	1.15	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	38,268	*****	*****	*****	*****	4.83	*****	3.34	*****	3.25 (1.06, 9.97)	0.039								
SV	38,268	*****	*****	*****	*****	1.49	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	38,268	*****	*****	*****	*****	4.68	*****	3.37	*****	3.55 (1.16, 10.89)	0.027								
SV	38,268	*****	*****	*****	*****	1.31	*****												
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	37,272	*****	*****	*****	*****	3.96	*****	2.47	*****	2.65 (0.83, 8.46)	0.099								
SV	40,092	*****	*****	*****	*****	1.49	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	26,730	*****	*****	*****	*****	4.59	*****	2.62	*****	2.33 (0.60, 9.02)	0.22								
SV	26,730	*****	*****	*****	*****	1.97	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	29,086	*****	*****	*****	*****	4.07	*****	2.8	*****	3.16 (0.84, 11.93)	0.089								
SV	35,104	*****	*****	*****	*****	1.27	*****												

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person	Risk per 1,000 Years	New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	25,060	*****	*****	*****	*****	2.7	*****	0.67	*****	1.32 (0.35, 4.91)	0.681								
SV	26,220	*****	*****	*****	*****	2.03	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	11,751	*****	*****	*****	*****	0	*****	-1.26	*****	-	-								
SV	11,751	*****	*****	*****	*****	1.26	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	19,427	*****	*****	*****	*****	1.4	*****	-0.33	*****	0.80 (0.13, 4.79)	0.807								
SV	23,009	*****	*****	*****	*****	1.73	*****												
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	19,855	*****	*****	*****	*****	0.78	*****	-0.82	*****	0.49 (0.12, 1.98)	0.319								
SV	21,275	*****	*****	*****	*****	1.6	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	7,579	*****	*****	*****	*****	1.85	*****	1.85	*****	-	-								
SV	7,579	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	15,292	*****	*****	*****	*****	1.02	*****	-0.48	*****	0.70 (0.17, 2.93)	0.622								
SV	18,774	*****	*****	*****	*****	1.5	*****												
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	12,717	*****	*****	*****	*****	1.91	*****	1.01	*****	2.06 (0.40, 10.63)	0.387								
SV	11,517	*****	*****	*****	*****	0.9	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	2,696	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	2,696	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	9,596	*****	*****	*****	*****	1.53	*****	0.54	*****	1.50 (0.25, 8.99)	0.656								
SV	10,345	*****	*****	*****	*****	0.99	*****												

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

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							Rate per 1,000 Person	Risk per 1,000 New Users											
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	9,003	*****	*****	*****	*****	1.5	*****	0.85	*****	2.30 (0.24, 22.11)	0.472								
SV	7,202	*****	*****	*****	*****	0.65	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	1,234	*****	*****	*****	*****	4.49	*****	0	*****	1.00 (0.06, 15.99)	1								
SV	1,234	*****	*****	*****	*****	4.49	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	6,637	*****	*****	*****	*****	2.07	*****	1.36	*****	2.89 (0.30, 27.76)	0.359								
SV	6,565	*****	*****	*****	*****	0.71	*****												

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 15. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000		Difference in Risk per Person Years										
							Risk per New Users	Years	Risk per 1,000 New Users										
No Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,846	*****	*****	*****	*****	2.38	*****												
SV	43,990	*****	*****	*****	*****	1.09	*****	1.29	*****	2.23 (1.26, 3.94)	0.006								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	38,210	*****	*****	*****	*****	3.26	*****												
SV	38,210	*****	*****	*****	*****	0.89	*****	2.37	*****	3.67 (1.49, 9.04)	0.005								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	38,210	*****	*****	*****	*****	2.48	*****												
SV	38,210	*****	*****	*****	*****	1.01	*****	1.47	*****	2.46 (1.31, 4.63)	0.005								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	48,846	*****	*****	*****	*****	3.95	*****												
SV	43,990	*****	*****	*****	*****	0.57	*****	3.37	*****	6.79 (1.54, 29.86)	0.011								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	38,210	*****	*****	*****	*****	4.83	*****												
SV	38,210	*****	*****	*****	*****	0.74	*****	4.09	*****	6.50 (1.47, 28.80)	0.014								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	38,210	*****	*****	*****	*****	4.69	*****												
SV	38,210	*****	*****	*****	*****	0.66	*****	4.03	*****	7.08 (1.60, 31.39)	0.01								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	37,236	*****	*****	*****	*****	3.57	*****												
SV	40,039	*****	*****	*****	*****	1.49	*****	2.08	*****	2.38 (0.73, 7.74)	0.148								

Table 15. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Incidence Rate Difference			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
						Rate per Person Years	Risk per New Users	Difference per 1,000 Person Years	Risk per 1,000 New Users	1,000		
						1,000	1,000	1,000	1,000	1,000		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	26,690	*****	*****	*****	*****	3.94	*****					
SV	26,690	*****	*****	*****	*****	1.97	*****	1.97	*****	2.00 (0.50, 8.00)		0.327
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	29,046	*****	*****	*****	*****	3.57	*****					
SV	35,052	*****	*****	*****	*****	1.27	*****	2.29	*****	2.76 (0.71, 10.67)		0.141
61 - 90 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	25,039	*****	*****	*****	*****	2.7	*****					
SV	26,182	*****	*****	*****	*****	1.53	*****	1.18	*****	1.76 (0.42, 7.35)		0.44
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	11,731	*****	*****	*****	*****	0	*****					
SV	11,731	*****	*****	*****	*****	0	*****	0	*****	-		-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	19,402	*****	*****	*****	*****	1.4	*****					
SV	22,969	*****	*****	*****	*****	1.16	*****	0.24	*****	1.20 (0.17, 8.52)		0.855
91 - 180 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	19,842	*****	*****	*****	*****	0.78	*****					
SV	21,244	*****	*****	*****	*****	1.34	*****	-0.56	*****	0.60 (0.14, 2.51)		0.481
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	7,574	*****	*****	*****	*****	1.85	*****					
SV	7,574	*****	*****	*****	*****	0	*****	1.85	*****	-		-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	15,278	*****	*****	*****	*****	1.03	*****					
SV	18,743	*****	*****	*****	*****	1.21	*****	-0.18	*****	0.88 (0.20, 3.95)		0.868

Table 15. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Risk per Person Years	Difference in Risk per 1,000 New Users										
							1,000	New Users	Person Years	1,000										
181 - 270 Days																				
Site-Adjusted Analysis																				
ACEI-SV 14-day	12,707	*****	*****	*****	*****	1.91	*****													
SV	11,500	*****	*****	*****	*****	0.9	*****	1.01		*****	2.06 (0.40, 10.62)	0.388								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ACEI-SV 14-day	2,698	*****	*****	*****	*****	0	*****													
SV	2,698	*****	*****	*****	*****	0	*****	0		*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ACEI-SV 14-day	9,587	*****	*****	*****	*****	1.54	*****													
SV	10,330	*****	*****	*****	*****	1	*****	0.54		*****	1.50 (0.25, 8.98)	0.657								
271 - 365 Days																				
Site-Adjusted Analysis																				
ACEI-SV 14-day	8,995	*****	*****	*****	*****	1.5	*****													
SV	7,191	*****	*****	*****	*****	0.66	*****	0.85		*****	2.29 (0.24, 22.09)	0.473								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ACEI-SV 14-day	1,234	*****	*****	*****	*****	4.48	*****													
SV	1,234	*****	*****	*****	*****	4.48	*****	0		*****	1.00 (0.06, 15.99)	1								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ACEI-SV 14-day	6,631	*****	*****	*****	*****	2.07	*****													
SV	6,557	*****	*****	*****	*****	0.71	*****	1.36		*****	2.88 (0.30, 27.73)	0.359								
Angioedema (-183, -1)																				
Overall																				
Site-Adjusted Analysis																				
ACEI-SV 14-day	46	*****	*****	*****	*****	77.34	*****													
SV	60	*****	*****	*****	*****	175.28	*****	-97.95		*****	0.52 (0.06, 4.73)	0.563								

Table 15. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000		Incidence Rate per 1,000		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
								Difference in Risk per Person Years					
						Average Person Years	New Users	Risk per Person Years	New Users				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	30	*****	*****	*****	*****	239.23	*****	-239.23	*****	0.50 (0.05, 5.51)	0.571		
SV	30	*****	*****	*****	*****	478.47	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	30	*****	*****	*****	*****	138.12	*****	-171.24	*****	0.44 (0.05, 4.14)	0.47		
SV	30	*****	*****	*****	*****	309.36	*****						
0 - 30 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	46	*****	*****	*****	*****	0	*****	-421.94	*****	-	-		
SV	60	*****	*****	*****	*****	421.94	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	30	*****	*****	*****	*****	0	*****	-952.38	*****	-	-		
SV	30	*****	*****	*****	*****	952.38	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	30	*****	*****	*****	*****	0	*****	-854.7	*****	-	-		
SV	30	*****	*****	*****	*****	854.7	*****						
31 - 60 Days													
Site-Adjusted Analysis													
ACEI-SV 14-day	39	*****	*****	*****	*****	371.75	*****	371.75	*****	-	-		
SV	55	*****	*****	*****	*****	0	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ACEI-SV 14-day	21	*****	*****	*****	*****	645.16	*****	645.16	*****	-	-		
SV	21	*****	*****	*****	*****	0	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ACEI-SV 14-day	24	*****	*****	*****	*****	574.71	*****	574.71	*****	-	-		
SV	26	*****	*****	*****	*****	0	*****						

Table 15. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Person	Incidence				Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹					
				Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Person Years	Rate per 1,000 New Users	Difference in Risk per Person Years	Risk per 1,000 New Users								
61 - 90 Days																		
Site-Adjusted Analysis																		
ACEI-SV 14-day	25	*****	*****	*****	*****	*****	0	*****	-336.7	*****	-	-	-					
SV	40	*****	*****	*****	*****	*****	336.7	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																		
ACEI-SV 14-day	18	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-					
SV	18	*****	*****	*****	*****	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																		
ACEI-SV 14-day	20	*****	*****	*****	*****	*****	0	*****	-564.97	*****	-	-	-					
SV	26	*****	*****	*****	*****	*****	564.97	*****										
91 - 180 Days																		
Site-Adjusted Analysis																		
ACEI-SV 14-day	17	*****	*****	*****	*****	*****	0	*****	-157.48	*****	-	-	-					
SV	32	*****	*****	*****	*****	*****	157.48	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																		
ACEI-SV 14-day	*****	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-					
SV	*****	*****	*****	*****	*****	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																		
ACEI-SV 14-day	11	*****	*****	*****	*****	*****	0	*****	-260.42	*****	-	-	-					
SV	19	*****	*****	*****	*****	*****	260.42	*****										
181 - 270 Days																		
Site-Adjusted Analysis																		
ACEI-SV 14-day	11	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-					
SV	21	*****	*****	*****	*****	*****	0	*****										

Table 15. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
								Rate per 1,000	Risk per Person	Difference in Risk per 1,000		
						Average Person	Average Person	Years	Person	Years		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
271 - 365 Days												
Site-Adjusted Analysis												
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****		0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****		0	*****	-	-

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Number of Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Difference in Risk per 1,000										
							Person	New Users	Person										
Race: Unknown																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	7,919	*****	*****	*****	*****	1.58	*****												
SV	7,229	*****	*****	*****	*****	0.75	*****	0.83	*****	2.18 (0.40, 11.95)	0.369								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	5,986	*****	*****	*****	*****	0.99	*****												
SV	5,986	*****	*****	*****	*****	0	*****	0.99	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	5,986	*****	*****	*****	*****	1.6	*****												
SV	5,986	*****	*****	*****	*****	0.88	*****	0.72	*****	1.92 (0.32, 11.58)	0.475								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	7,919	*****	*****	*****	*****	1.79	*****												
SV	7,229	*****	*****	*****	*****	0	*****	1.79	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	5,986	*****	*****	*****	*****	0	*****												
SV	5,986	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	5,986	*****	*****	*****	*****	0	*****												
SV	5,986	*****	*****	*****	*****	0	*****	0	*****	-	-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	5,644	*****	*****	*****	*****	2.59	*****												
SV	6,518	*****	*****	*****	*****	0	*****	2.59	*****	-	-								

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Incidence		Incidence Rate per 1,000		Difference in Risk per Person per 1,000	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
				Average Person	Average Person	Number of Events	Rate per Person Years			
				Years at Risk	Years at Risk	Events	Years			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²										
ACEI-SV 14-day	3,901	*****	*****	*****	*****	4.45	*****	4.45	*****	-
SV	3,901	*****	*****	*****	*****	0	*****			-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
ACEI-SV 14-day	4,250	*****	*****	*****	*****	3.45	*****	3.45	*****	-
SV	5,457	*****	*****	*****	*****	0	*****			-
61 - 90 Days										
Site-Adjusted Analysis										
ACEI-SV 14-day	3,863	*****	*****	*****	*****	3.53	*****	0.48	*****	1.09 (0.07, 17.44)
SV	4,389	*****	*****	*****	*****	3.04	*****			0.951
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²										
ACEI-SV 14-day	1,763	*****	*****	*****	*****	0	*****	0	*****	-
SV	1,763	*****	*****	*****	*****	0	*****			-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
ACEI-SV 14-day	2,894	*****	*****	*****	*****	4.74	*****	1.14	*****	1.29 (0.08, 20.62)
SV	3,703	*****	*****	*****	*****	3.6	*****			0.858
91 - 180 Days										
Site-Adjusted Analysis										
ACEI-SV 14-day	3,024	*****	*****	*****	*****	0	*****	-1.55	*****	-
SV	3,550	*****	*****	*****	*****	1.55	*****			-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²										
ACEI-SV 14-day	1,104	*****	*****	*****	*****	0	*****	0	*****	-
SV	1,104	*****	*****	*****	*****	0	*****			-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
ACEI-SV 14-day	2,235	*****	*****	*****	*****	0	*****	-1.8	*****	-
SV	3,011	*****	*****	*****	*****	1.8	*****			-

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 Person Years										
							New Users	Risk per 1,000 New Users											
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	1,953	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	2,030	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	400	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	400	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	1,427	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	1,773	*****	*****	*****	*****	0	*****	0	*****	-	-								
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	1,379	*****	*****	*****	*****	3.25	*****	3.25	*****	-	-								
SV	1,283	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	180	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	180	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	996	*****	*****	*****	*****	4.54	*****	4.54	*****	-	-								
SV	1,140	*****	*****	*****	*****	0	*****	0	*****	-	-								
Race: American Indian																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	160	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	143	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Incidence		Incidence Rate per 1,000 Person Years		Difference in Risk per Person Years	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
				Average Person Days	Average Person Years at Risk	Number of Events	Rate per 1,000 Person Years			
				Person	Person	Number	Rate per 1,000 Person Years			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²										
ACEI-SV 14-day	98	*****	*****	*****	*****	*****	0	*****	0	*****
SV	98	*****	*****	*****	*****	*****	0	*****	0	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
ACEI-SV 14-day	98	*****	*****	*****	*****	*****	0	*****	0	*****
SV	98	*****	*****	*****	*****	*****	0	*****	0	-
0 - 30 Days										
Site-Adjusted Analysis										
ACEI-SV 14-day	160	*****	*****	*****	*****	*****	0	*****	0	*****
SV	143	*****	*****	*****	*****	*****	0	*****	0	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²										
ACEI-SV 14-day	98	*****	*****	*****	*****	*****	0	*****	0	*****
SV	98	*****	*****	*****	*****	*****	0	*****	0	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
ACEI-SV 14-day	98	*****	*****	*****	*****	*****	0	*****	0	*****
SV	98	*****	*****	*****	*****	*****	0	*****	0	-
31 - 60 Days										
Site-Adjusted Analysis										
ACEI-SV 14-day	120	*****	*****	*****	*****	*****	0	*****	0	*****
SV	125	*****	*****	*****	*****	*****	0	*****	0	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²										
ACEI-SV 14-day	60	*****	*****	*****	*****	*****	0	*****	0	*****
SV	60	*****	*****	*****	*****	*****	0	*****	0	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05										
ACEI-SV 14-day	71	*****	*****	*****	*****	*****	0	*****	0	*****
SV	84	*****	*****	*****	*****	*****	0	*****	0	-

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Average Person	Average Person	Rate per 1,000 Person										
							Number of Events	Years	New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	77	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	85	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	25	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	25	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	43	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	56	*****	*****	*****	*****	0	*****	0	*****	-	-								
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	61	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	64	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	18	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	18	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	37	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	46	*****	*****	*****	*****	0	*****	0	*****	-	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	37	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	33	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	23	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	26	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Number of Years at Risk	Average Person Days at Risk	Number of Years at Risk	Incidence Rate per 1,000 Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹							
						Average Person Days at Risk	Average Number of Events	Rate per 1,000 Person Years									
						Number of Events	New Users	Risk per 1,000 New Users									
271 - 365 Days																	
Site-Adjusted Analysis																	
ACEI-SV 14-day	28	*****	*****	*****	*****	0	*****	0	*****	-							
SV	19	*****	*****	*****	*****	0	*****	0	*****	-							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																	
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-							
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																	
ACEI-SV 14-day	17	*****	*****	*****	*****	0	*****	0	*****	-							
SV	15	*****	*****	*****	*****	0	*****	0	*****	-							
Race: Asian																	
Overall																	
Site-Adjusted Analysis																	
ACEI-SV 14-day	525	*****	*****	*****	*****	0	*****	0	*****	-							
SV	537	*****	*****	*****	*****	0	*****	0	*****	-							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																	
ACEI-SV 14-day	414	*****	*****	*****	*****	0	*****	0	*****	-							
SV	414	*****	*****	*****	*****	0	*****	0	*****	-							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																	
ACEI-SV 14-day	414	*****	*****	*****	*****	0	*****	0	*****	-							
SV	414	*****	*****	*****	*****	0	*****	0	*****	-							

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 Person Years										
							New Users	Risk per 1,000 New Users											
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	525	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	537	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	414	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	414	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	414	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	414	*****	*****	*****	*****	0	*****	0	*****	-	-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	381	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	496	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	281	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	281	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	304	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	384	*****	*****	*****	*****	0	*****	0	*****	-	-								
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	260	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	337	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	126	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	126	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	201	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	260	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 Person Years										
							New Users	Risk per 1,000 New Users											
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	195	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	258	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	71	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	71	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	152	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	204	*****	*****	*****	*****	0	*****	0	*****	-	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	134	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	139	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	22	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	22	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	104	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	105	*****	*****	*****	*****	0	*****	0	*****	-	-								
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	101	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	89	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	15	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	15	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	76	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	71	*****	*****	*****	*****	0	*****	0	*****	-	-								
Race: Black																			

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person										
							Average Person	Risk per 1,000 New Users	New Users Years										
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	5,969	*****	*****	*****	*****	6.92	*****												
SV	5,968	*****	*****	*****	*****	3.96	*****	2.95	*****	1.79 (0.70, 4.55)	0.223								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	4,916	*****	*****	*****	*****	10.79	*****												
SV	4,916	*****	*****	*****	*****	4.05	*****	6.74	*****	2.67 (0.71, 10.05)	0.147								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	4,916	*****	*****	*****	*****	7.05	*****												
SV	4,916	*****	*****	*****	*****	4.04	*****	3.01	*****	1.80 (0.65, 4.96)	0.256								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	5,969	*****	*****	*****	*****	13.97	*****												
SV	5,968	*****	*****	*****	*****	2.12	*****	11.85	*****	6.43 (0.77, 53.41)	0.085								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	4,916	*****	*****	*****	*****	17.46	*****												
SV	4,916	*****	*****	*****	*****	2.91	*****	14.55	*****	6.00 (0.72, 49.84)	0.097								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	4,916	*****	*****	*****	*****	16.92	*****												
SV	4,916	*****	*****	*****	*****	2.56	*****	14.36	*****	6.51 (0.78, 54.09)	0.083								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	4,445	*****	*****	*****	*****	13.8	*****												
SV	5,422	*****	*****	*****	*****	2.9	*****	10.9	*****	4.85 (0.54, 43.40)	0.158								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	3,379	*****	*****	*****	*****	11.15	*****												
SV	3,379	*****	*****	*****	*****	0	*****	11.15	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	3,684	*****	*****	*****	*****	12.49	*****												
SV	4,519	*****	*****	*****	*****	3.49	*****	9	*****	3.69 (0.38, 35.49)	0.259								

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person	Risk per 1,000 Years	New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	2,740	*****	*****	*****	*****	0	*****	-4.38	*****	-	-								
SV	3,115	*****	*****	*****	*****	4.38	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	1,211	*****	*****	*****	*****	0	*****	-12.61	*****	-	-								
SV	1,211	*****	*****	*****	*****	12.61	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	2,271	*****	*****	*****	*****	0	*****	-5.28	*****	-	-								
SV	2,577	*****	*****	*****	*****	5.28	*****												
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	2,051	*****	*****	*****	*****	2.61	*****	-2.67	*****	0.47 (0.04, 5.21)	0.54								
SV	2,364	*****	*****	*****	*****	5.28	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	691	*****	*****	*****	*****	0	*****	-11.22	*****	-	-								
SV	691	*****	*****	*****	*****	11.22	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	1,690	*****	*****	*****	*****	3.21	*****	0.07	*****	0.97 (0.06, 15.56)	0.985								
SV	1,968	*****	*****	*****	*****	3.13	*****												
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	1,228	*****	*****	*****	*****	3.99	*****	-5.87	*****	0.40 (0.04, 4.42)	0.456								
SV	1,074	*****	*****	*****	*****	9.86	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	198	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	198	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	995	*****	*****	*****	*****	0	*****	-11.28	*****	-	-								
SV	927	*****	*****	*****	*****	11.28	*****												

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Difference in Risk per Person										
							Rate per 1,000	Risk per Person	Risk per 1,000										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	838	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	661	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	98	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	98	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	677	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	587	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Number of Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person										
							Rate per 1,000 Person	Risk per 1,000 New Users	Rate per 1,000 Person										
Race: Pacific Islander																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	46	*****	*****	*****	*****	0	*****		0	*****	-								
SV	47	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	38	*****	*****	*****	*****	0	*****		0	*****	-								
SV	38	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	38	*****	*****	*****	*****	0	*****		0	*****	-								
SV	38	*****	*****	*****	*****	0	*****		0	*****	-								
0 - 30 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	46	*****	*****	*****	*****	0	*****		0	*****	-								
SV	47	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	38	*****	*****	*****	*****	0	*****		0	*****	-								
SV	38	*****	*****	*****	*****	0	*****		0	*****	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	38	*****	*****	*****	*****	0	*****		0	*****	-								
SV	38	*****	*****	*****	*****	0	*****		0	*****	-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	33	*****	*****	*****	*****	0	*****		0	*****	-								
SV	43	*****	*****	*****	*****	0	*****		0	*****	-								

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Number of 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 Person Years	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹			
								Rate per 1,000 Person Years							
						Average Person	Average Number of Events	Risk per 1,000 Person Years	New Users						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²															
ACEI-SV 14-day	25	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	25	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05															
ACEI-SV 14-day	27	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	35	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
61 - 90 Days															
Site-Adjusted Analysis															
ACEI-SV 14-day	22	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	28	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²															
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05															
ACEI-SV 14-day	18	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	23	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
91 - 180 Days															
Site-Adjusted Analysis															
ACEI-SV 14-day	19	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	26	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²															
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05															
ACEI-SV 14-day	15	*****	*****	*****	*****	0	*****	0	*****	-	-	-			
SV	21	*****	*****	*****	*****	0	*****	0	*****	-	-	-			

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Person Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Difference in Risk per Person										
							Rate per 1,000 Person	Risk per 1,000 New Users	New Users Years										
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	13	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	15	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	11	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	12	*****	*****	*****	*****	0	*****	0	*****	-	-								
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
Race: White																			
Overall																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	34,273	*****	*****	*****	*****	2.02	*****	0.92	*****	1.89 (0.94, 3.77)	0.073								
SV	30,126	*****	*****	*****	*****	1.09	*****												

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 New Users		
							Average Person	Average Person	Risk per 1,000 Person Years		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	26,475	*****	*****	*****	*****	2.07	*****	1.45	*****	3.33 (0.92, 12.11)	0.067
SV	26,475	*****	*****	*****	*****	0.62	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	26,475	*****	*****	*****	*****	2.12	*****	1.21	*****	2.30 (1.04, 5.09)	0.04
SV	26,475	*****	*****	*****	*****	0.92	*****				
0 - 30 Days											
Site-Adjusted Analysis											
ACEI-SV 14-day	34,273	*****	*****	*****	*****	2.79	*****	1.53	*****	2.25 (0.58, 8.72)	0.239
SV	30,126	*****	*****	*****	*****	1.25	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	26,475	*****	*****	*****	*****	3.72	*****	2.66	*****	3.50 (0.73, 16.85)	0.118
SV	26,475	*****	*****	*****	*****	1.06	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	26,475	*****	*****	*****	*****	3.61	*****	2.19	*****	2.56 (0.66, 9.90)	0.173
SV	26,475	*****	*****	*****	*****	1.42	*****				
31 - 60 Days											
Site-Adjusted Analysis											
ACEI-SV 14-day	26,652	*****	*****	*****	*****	2.76	*****	1.14	*****	1.69 (0.40, 7.06)	0.474
SV	27,490	*****	*****	*****	*****	1.61	*****				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ACEI-SV 14-day	18,856	*****	*****	*****	*****	2.76	*****	2.76	*****	-	-
SV	18,856	*****	*****	*****	*****	0	*****				
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ACEI-SV 14-day	20,494	*****	*****	*****	*****	2.87	*****	2.27	*****	4.65 (0.52, 41.63)	0.169
SV	24,319	*****	*****	*****	*****	0.61	*****				

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 New Users										
							Rate per 1,000 Person	Risk per 1,000 Years	New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	18,105	*****	*****	*****	*****	2.98	*****	1.53	*****	2.05 (0.38, 11.19)	0.407								
SV	18,275	*****	*****	*****	*****	1.45	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	8,519	*****	*****	*****	*****	0	*****	-1.72	*****	-	-								
SV	8,519	*****	*****	*****	*****	1.72	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	13,847	*****	*****	*****	*****	0.98	*****	0.16	*****	1.20 (0.07, 19.14)	0.899								
SV	16,209	*****	*****	*****	*****	0.82	*****												
91 - 180 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	14,508	*****	*****	*****	*****	0.71	*****	-0.42	*****	0.63 (0.11, 3.79)	0.617								
SV	15,017	*****	*****	*****	*****	1.13	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	5,593	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	5,593	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	11,032	*****	*****	*****	*****	0.94	*****	-0.32	*****	0.74 (0.12, 4.46)	0.747								
SV	13,380	*****	*****	*****	*****	1.26	*****												
181 - 270 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	9,357	*****	*****	*****	*****	2.07	*****	2.07	*****	-	-								
SV	8,235	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	2,006	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	2,006	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	6,969	*****	*****	*****	*****	2.12	*****	2.12	*****	-	-								
SV	7,446	*****	*****	*****	*****	0	*****												

Table 16. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000		Difference in Risk per 1,000 Person										
							Average Person	Risk per 1,000	1,000 Person										
271 - 365 Days																			
Site-Adjusted Analysis																			
ACEI-SV 14-day	6,657	*****	*****	*****	*****	1.35	*****		0.43	*****	1.44 (0.13, 15.87)								
SV	5,147	*****	*****	*****	*****	0.92	*****				0.767								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ACEI-SV 14-day	901	*****	*****	*****	*****	0	*****		0	*****	-								
SV	901	*****	*****	*****	*****	0	*****				-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ACEI-SV 14-day	4,821	*****	*****	*****	*****	1.9	*****		0.9	*****	1.86 (0.17, 20.53)								
SV	4,709	*****	*****	*****	*****	0.99	*****				0.612								

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 17. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Years	Incidence		Difference in Risk per Person	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹									
							Incidence Rate per 1,000	Rate per 1,000												
							Number of New Users	Person Years												
Overall																				
Site-Adjusted Analysis																				
ARB-SV 14-day	35,088	*****	*****	*****	*****	3.28	*****	1.94	*****	2.49 (1.46, 4.25)	<0.001									
SV	44,361	*****	*****	*****	*****	1.33	*****													
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ARB-SV 14-day	32,174	*****	*****	*****	*****	4.53	*****	2.96	*****	2.89 (1.35, 6.16)	0.006									
SV	32,174	*****	*****	*****	*****	1.57	*****													
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ARB-SV 14-day	32,174	*****	*****	*****	*****	3.28	*****	1.92	*****	2.45 (1.36, 4.43)	0.003									
SV	32,174	*****	*****	*****	*****	1.36	*****													
0 - 30 Days																				
Site-Adjusted Analysis																				
ARB-SV 14-day	35,088	*****	*****	*****	*****	5.11	*****	3.97	*****	4.47 (1.46, 13.71)	0.009									
SV	44,361	*****	*****	*****	*****	1.14	*****													
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																				
ARB-SV 14-day	32,174	*****	*****	*****	*****	5.29	*****	3.97	*****	4.00 (1.13, 14.17)	0.032									
SV	32,174	*****	*****	*****	*****	1.32	*****													
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																				
ARB-SV 14-day	32,174	*****	*****	*****	*****	5.13	*****	3.96	*****	4.31 (1.22, 15.29)	0.024									
SV	32,174	*****	*****	*****	*****	1.17	*****													
31 - 60 Days																				
Site-Adjusted Analysis																				
ARB-SV 14-day	26,678	*****	*****	*****	*****	3.87	*****	2.39	*****	2.59 (0.76, 8.83)	0.13									
SV	40,380	*****	*****	*****	*****	1.47	*****													

Table 17. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

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			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
						Rate per 1,000 Person Years		Rate per 1,000 New Users	Difference in Risk per 1,000 Person Years	Risk per 1,000 New Users		
						Average Person Years	Average Person Days	Risk per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹	Risk per 1,000 New Users		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	22,573	*****	*****	*****	*****	4.62	*****	3.08	*****	3.00 (0.61, 14.86)	0.178	
SV	22,573	*****	*****	*****	*****	1.54	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	24,555	*****	*****	*****	*****	4.2	*****	2.69	*****	2.78 (0.72, 10.76)	0.138	
SV	29,561	*****	*****	*****	*****	1.51	*****					
61 - 90 Days												
Site-Adjusted Analysis												
ARB-SV 14-day	17,947	*****	*****	*****	*****	3.77	*****	1.76	*****	1.80 (0.48, 6.70)	0.382	
SV	26,440	*****	*****	*****	*****	2.02	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	10,134	*****	*****	*****	*****	5.78	*****	4.34	*****	4.00 (0.45, 35.79)	0.215	
SV	10,134	*****	*****	*****	*****	1.45	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	16,557	*****	*****	*****	*****	4.09	*****	2.05	*****	1.98 (0.47, 8.27)	0.351	
SV	19,509	*****	*****	*****	*****	2.04	*****					
91 - 180 Days												
Site-Adjusted Analysis												
ARB-SV 14-day	14,275	*****	*****	*****	*****	2.57	*****	0.97	*****	1.68 (0.56, 5.02)	0.357	
SV	21,443	*****	*****	*****	*****	1.6	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	6,661	*****	*****	*****	*****	4.29	*****	2.14	*****	2.00 (0.37, 10.92)	0.423	
SV	6,661	*****	*****	*****	*****	2.14	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	13,165	*****	*****	*****	*****	2.79	*****	1.37	*****	2.01 (0.59, 6.90)	0.264	
SV	16,012	*****	*****	*****	*****	1.42	*****					
181 - 270 Days												
Site-Adjusted Analysis												
ARB-SV 14-day	8,980	*****	*****	*****	*****	2.18	*****	1.29	*****	2.33 (0.43, 12.71)	0.329	
SV	11,557	*****	*****	*****	*****	0.89	*****					

Table 17. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type and Risk Window

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		Risk per Person Years	Difference in Risk per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
						Average Person Days at Risk	Average Person Years at Risk	Rate per 1,000 Person Years	Difference in Risk per 1,000 Person Years				
						Number of Events	Number of Events	Rate per 1,000 Person Years	Hazard Ratio (95% Confidence Interval) ¹				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ARB-SV 14-day	2,297	*****	*****	*****	*****	0	*****	-2.71	*****	-	-		
SV	2,297	*****	*****	*****	*****	2.71	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ARB-SV 14-day	8,256	*****	*****	*****	*****	1.78	*****	0.61	*****	1.52 (0.25, 9.08)	0.648		
SV	8,794	*****	*****	*****	*****	1.17	*****						
271 - 365 Days													
Site-Adjusted Analysis													
ARB-SV 14-day	6,253	*****	*****	*****	*****	1.47	*****	0.82	*****	2.13 (0.19, 23.50)	0.537		
SV	7,227	*****	*****	*****	*****	0.65	*****						
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²													
ARB-SV 14-day	999	*****	*****	*****	*****	0	*****	0	*****	-	-		
SV	999	*****	*****	*****	*****	0	*****						
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05													
ARB-SV 14-day	5,732	*****	*****	*****	*****	0.81	*****	-0.03	*****	0.95 (0.06, 15.12)	0.969		
SV	5,571	*****	*****	*****	*****	0.84	*****						

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 (ARB) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹							
							Incidence		Rate per 1,000	Difference in Risk per Person									
							Average Person	Average Person											
No Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	35,055	*****	*****	*****	*****	2.93	*****		1.85	*****	2.77 (1.55, 4.97)	<0.001							
SV	44,301	*****	*****	*****	*****	1.08	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	32,130	*****	*****	*****	*****	3.84	*****		2.62	*****	3.14 (1.34, 7.36)	0.008							
SV	32,130	*****	*****	*****	*****	1.22	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	32,130	*****	*****	*****	*****	2.91	*****		1.8	*****	2.69 (1.41, 5.15)	0.003							
SV	32,130	*****	*****	*****	*****	1.11	*****												
0 - 30 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	35,055	*****	*****	*****	*****	3.54	*****		2.97	*****	6.32 (1.36, 29.26)	0.018							
SV	44,301	*****	*****	*****	*****	0.57	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	32,130	*****	*****	*****	*****	3.53	*****		2.65	*****	4.00 (0.85, 18.84)	0.08							
SV	32,130	*****	*****	*****	*****	0.88	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	32,130	*****	*****	*****	*****	3.43	*****		2.64	*****	4.39 (0.93, 20.68)	0.061							
SV	32,130	*****	*****	*****	*****	0.78	*****												
31 - 60 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	26,657	*****	*****	*****	*****	3.87	*****		2.39	*****	2.58 (0.76, 8.83)	0.13							
SV	40,327	*****	*****	*****	*****	1.48	*****												

Table 18. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
						Rate per 1,000 Person Years		Rate per 1,000 New Users Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹		
						Average Person	Average Person	Risk per 1,000 Person Years	Risk per 1,000 New Users			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	22,545	*****	*****	*****	*****	4.63	*****	3.09	*****	3.00 (0.61, 14.86)	0.178	
SV	22,545	*****	*****	*****	*****	1.54	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	24,524	*****	*****	*****	*****	4.2	*****	2.69	*****	2.78 (0.72, 10.75)	0.138	
SV	29,521	*****	*****	*****	*****	1.51	*****					
61 - 90 Days												
Site-Adjusted Analysis												
ARB-SV 14-day	17,933	*****	*****	*****	*****	3.78	*****	2.26	*****	2.40 (0.57, 10.05)	0.23	
SV	26,402	*****	*****	*****	*****	1.52	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	10,118	*****	*****	*****	*****	5.79	*****	4.34	*****	4.00 (0.45, 35.79)	0.215	
SV	10,118	*****	*****	*****	*****	1.45	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	16,536	*****	*****	*****	*****	4.1	*****	2.73	*****	2.96 (0.58, 15.28)	0.194	
SV	19,481	*****	*****	*****	*****	1.36	*****					
91 - 180 Days												
Site-Adjusted Analysis												
ARB-SV 14-day	14,263	*****	*****	*****	*****	2.57	*****	1.24	*****	2.04 (0.64, 6.47)	0.228	
SV	21,412	*****	*****	*****	*****	1.33	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	6,649	*****	*****	*****	*****	4.3	*****	3.22	*****	4.00 (0.45, 35.79)	0.215	
SV	6,649	*****	*****	*****	*****	1.07	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	13,147	*****	*****	*****	*****	2.79	*****	1.73	*****	2.70 (0.70, 10.48)	0.15	
SV	15,990	*****	*****	*****	*****	1.06	*****					

Table 18. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹							
							Incidence		Rate per 1,000 New Users	Difference in Risk per 1,000 Person Years									
							Rate per 1,000 Person	Risk per 1,000 New Users											
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	8,973	*****	*****	*****	*****	2.19	*****	1.29	*****	2.33 (0.43, 12.70)	0.329								
SV	11,540	*****	*****	*****	*****	0.9	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	2,294	*****	*****	*****	*****	0	*****	-2.71	*****	-	-								
SV	2,294	*****	*****	*****	*****	2.71	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	8,246	*****	*****	*****	*****	1.78	*****	0.61	*****	1.52 (0.25, 9.08)	0.648								
SV	8,778	*****	*****	*****	*****	1.17	*****												
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	6,246	*****	*****	*****	*****	1.47	*****	0.82	*****	2.13 (0.19, 23.49)	0.537								
SV	7,216	*****	*****	*****	*****	0.65	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	998	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	998	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	5,723	*****	*****	*****	*****	0.81	*****	-0.03	*****	0.95 (0.06, 15.11)	0.968								
SV	5,562	*****	*****	*****	*****	0.84	*****												
Angioedema (-183, -1)																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	33	*****	*****	*****	*****	390.63	*****	215.65	*****	1.96 (0.48, 8.02)	0.347								
SV	60	*****	*****	*****	*****	174.98	*****												

Table 18. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence		Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
						Rate per 1,000 Person Years		Rate per 1,000 New Users Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹		
						Average Person	Average Person	Risk per 1,000 Person Years	Risk per 1,000 New Users			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	22	*****	*****	*****	*****	835.65	*****	557.1	*****	3.00 (0.31, 28.84)	0.341	
SV	22	*****	*****	*****	*****	278.55	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	22	*****	*****	*****	*****	571.43	*****	302.61	*****	1.86 (0.31, 11.19)	0.498	
SV	22	*****	*****	*****	*****	268.82	*****					
0 - 30 Days												
Site-Adjusted Analysis												
ARB-SV 14-day	33	*****	*****	*****	*****	1,860.47	*****	1,440.30	*****	4.17 (0.74, 23.58)	0.107	
SV	60	*****	*****	*****	*****	420.17	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	22	*****	*****	*****	*****	2,272.73	*****	1,515.15	*****	3.00 (0.31, 28.84)	0.341	
SV	22	*****	*****	*****	*****	757.58	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	22	*****	*****	*****	*****	2,205.88	*****	1,631.17	*****	3.45 (0.36, 33.15)	0.284	
SV	22	*****	*****	*****	*****	574.71	*****					
31 - 60 Days												
Site-Adjusted Analysis												
ARB-SV 14-day	23	*****	*****	*****	*****	0	*****	0	*****	-	-	
SV	55	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²												
ARB-SV 14-day	13	*****	*****	*****	*****	0	*****	0	*****	-	-	
SV	13	*****	*****	*****	*****	0	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05												
ARB-SV 14-day	14	*****	*****	*****	*****	0	*****	0	*****	-	-	
SV	20	*****	*****	*****	*****	0	*****					

Table 18. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per Person Years	Incidence				Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹							
							Incidence		Rate per 1,000 New Users	Difference in Risk per 1,000 Person Years									
							Rate per 1,000	Risk per 1,000											
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	14	*****	*****	*****	*****	0	*****	-320.51	*****	-	-								
SV	42	*****	*****	*****	*****	320.51	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	-1041.67	*****	-	-								
SV	13	*****	*****	*****	*****	1,041.67	*****												
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	12	*****	*****	*****	*****	0	*****	-153.85	*****	-	-								
SV	35	*****	*****	*****	*****	153.85	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	*****	*****	*****	*****	*****	0	*****												
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	21	*****	*****	*****	*****	0	*****												

Table 18. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, 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 Risk Window

Medical Product	Number of New Users	Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence						Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹		
						Incidence Rate per 1,000 Person Years		Rate per 1,000 New Users Years		Difference in Risk per 1,000 New Users Years					
						Average Person	Average Person	Person	Year	Person	Year				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²															
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05															
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
271 - 365 Days															
Site-Adjusted Analysis															
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
SV	16	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²															
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05															
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-	-	-		

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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 New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000		Difference in Risk per 1,000 Person										
							Incidence Rate per 1,000 New Users	Risk per 1,000 Years	New Users										
Race: Unknown																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	5,599	*****	*****	*****	*****	1.71	*****												
SV	7,272	*****	*****	*****	*****	0.75	*****	0.96	*****	2.37 (0.38, 14.70)	0.354								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	4,778	*****	*****	*****	*****	2.43	*****												
SV	4,778	*****	*****	*****	*****	0	*****	2.43	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	4,778	*****	*****	*****	*****	1.33	*****												
SV	4,778	*****	*****	*****	*****	0.56	*****	0.77	*****	2.59 (0.23, 28.82)	0.439								
0 - 30 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	5,599	*****	*****	*****	*****	5.08	*****												
SV	7,272	*****	*****	*****	*****	0	*****	5.08	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	4,778	*****	*****	*****	*****	3.08	*****												
SV	4,778	*****	*****	*****	*****	0	*****	3.08	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	4,778	*****	*****	*****	*****	2.98	*****												
SV	4,778	*****	*****	*****	*****	0	*****	2.98	*****	-	-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	3,983	*****	*****	*****	*****	0	*****												
SV	6,558	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate		Difference		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence	Rate per 1,000 New Users	Difference in Rate per 1,000 Person Years	Risk per 1,000 New Users	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹		
							Rate per 1,000 Person Years	Difference in Risk per 1,000 New Users	Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹	(95% Confidence Interval) ¹			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ARB-SV 14-day	3,097	*****	*****	*****	*****	0	*****		0	*****		-	-	
SV	3,097	*****	*****	*****	*****	0	*****		0	*****		-	-	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ARB-SV 14-day	3,394	*****	*****	*****	*****	0	*****		0	*****		-	-	
SV	4,349	*****	*****	*****	*****	0	*****		0	*****		-	-	
61 - 90 Days														
Site-Adjusted Analysis														
ARB-SV 14-day	2,676	*****	*****	*****	*****	0	*****		-3.02	*****		-	-	
SV	4,423	*****	*****	*****	*****	3.02	*****					-	-	
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ARB-SV 14-day	1,408	*****	*****	*****	*****	0	*****		0	*****		-	-	
SV	1,408	*****	*****	*****	*****	0	*****		0	*****		-	-	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ARB-SV 14-day	2,292	*****	*****	*****	*****	0	*****		-4.55	*****		-	-	
SV	2,930	*****	*****	*****	*****	4.55	*****					-	-	
91 - 180 Days														
Site-Adjusted Analysis														
ARB-SV 14-day	2,116	*****	*****	*****	*****	2.42	*****		0.88	*****	2.44 (0.15, 39.11)		0.527	
SV	3,574	*****	*****	*****	*****	1.54	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ARB-SV 14-day	916	*****	*****	*****	*****	7.1	*****		7.1	*****		-	-	
SV	916	*****	*****	*****	*****	0	*****		7.1	*****		-	-	
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ARB-SV 14-day	1,814	*****	*****	*****	*****	2.8	*****		2.8	*****		-	-	
SV	2,382	*****	*****	*****	*****	0	*****					-	-	

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person	Difference in Risk per 1,000 Person	Risk per 1,000 New Users										
							1,000 Person	per 1,000 Person	New Users										
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	1,359	*****	*****	*****	*****	0	*****			-	-								
SV	2,036	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	364	*****	*****	*****	*****	0	*****			-	-								
SV	364	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	1,179	*****	*****	*****	*****	0	*****			-	-								
SV	1,384	*****	*****	*****	*****	0	*****	0	*****										
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	933	*****	*****	*****	*****	0	*****			-	-								
SV	1,291	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	152	*****	*****	*****	*****	0	*****			-	-								
SV	152	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	803	172.13	78.29	0.21	0	0	*****			-	-								
SV	891	193.31	79.24	0.22	0	0	*****	0	*****										
Race: American Indian																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	81	*****	*****	*****	*****	0	*****			-	-								
SV	145	*****	*****	*****	*****	0	*****	0	*****										

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users		Difference in Risk per 1,000 Person Years		
							Rate per 1,000 New Users	Risk per 1,000 Person Years			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV 14-day	66	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	66	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV 14-day	66	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	66	*****	*****	*****	*****	0	*****	0	*****	-	-
0 - 30 Days											
Site-Adjusted Analysis											
ARB-SV 14-day	81	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	145	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV 14-day	66	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	66	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV 14-day	66	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	66	*****	*****	*****	*****	0	*****	0	*****	-	-
31 - 60 Days											
Site-Adjusted Analysis											
ARB-SV 14-day	57	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	129	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV 14-day	43	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	43	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV 14-day	49	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	60	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							Incidence Rate per 1,000 New Users	Incidence Rate per 1,000 Years	Risk per 1,000 New Users										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	33	*****	*****	*****	*****	0	*****			-	-								
SV	87	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	16	*****	*****	*****	*****	0	*****			-	-								
SV	16	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	26	*****	*****	*****	*****	0	*****			-	-								
SV	36	*****	*****	*****	*****	0	*****	0	*****										
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	29	*****	*****	*****	*****	0	*****			-	-								
SV	66	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	13	*****	*****	*****	*****	0	*****			-	-								
SV	13	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	24	*****	*****	*****	*****	0	*****			-	-								
SV	29	*****	*****	*****	*****	0	*****	0	*****										
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	16	*****	*****	*****	*****	0	*****			-	-								
SV	33	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	12	*****	*****	*****	*****	0	*****			-	-								
SV	13	*****	*****	*****	*****	0	*****	0	*****										

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person		Difference in Risk per 1,000 Person										
							1,000 New Users	Risk per Years	New Users										
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	12	*****	*****	*****	*****	0	*****			-	-								
SV	19	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****										
Race: Asian																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	847	*****	*****	*****	*****	3.86	*****			-	-								
SV	532	*****	*****	*****	*****	0	*****	3.86	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	452	*****	*****	*****	*****	0	*****			-	-								
SV	452	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	452	*****	*****	*****	*****	0	*****			-	-								
SV	452	*****	*****	*****	*****	0	*****	0	*****										

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per Person		Difference in Risk per Person										
							1,000 Person New Users	Risk per 1,000 Years	New Users										
0 - 30 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	847	*****	*****	*****	*****	0	*****			-	-								
SV	532	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	452	*****	*****	*****	*****	0	*****			-	-								
SV	452	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	452	*****	*****	*****	*****	0	*****			-	-								
SV	452	*****	*****	*****	*****	0	*****	0	*****										
31 - 60 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	587	*****	*****	*****	*****	0	*****			-	-								
SV	490	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	295	*****	*****	*****	*****	0	*****			-	-								
SV	295	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	318	*****	*****	*****	*****	0	*****			-	-								
SV	418	*****	*****	*****	*****	0	*****	0	*****										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	393	*****	*****	*****	*****	0	*****			-	-								
SV	334	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	146	*****	*****	*****	*****	0	*****			-	-								
SV	146	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	219	*****	*****	*****	*****	0	*****			-	-								
SV	293	*****	*****	*****	*****	0	*****	0	*****										

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per Person		Difference in Risk per Person										
							1,000 Person New Users	Risk per 1,000 Years	New Users										
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	309	*****	*****	*****	*****	0	*****			-	-								
SV	256	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	85	*****	*****	*****	*****	0	*****			-	-								
SV	85	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	165	*****	*****	*****	*****	0	*****			-	-								
SV	221	*****	*****	*****	*****	0	*****	0	*****										
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	207	*****	*****	*****	*****	24.17	*****			-	-								
SV	138	*****	*****	*****	*****	0	*****	24.17	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	33	*****	*****	*****	*****	0	*****			-	-								
SV	33	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	116	*****	*****	*****	*****	0	*****			-	-								
SV	116	*****	*****	*****	*****	0	*****	0	*****										
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	134	*****	*****	*****	*****	0	*****			-	-								
SV	88	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	14	*****	*****	*****	*****	0	*****			-	-								
SV	14	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	70	*****	*****	*****	*****	0	*****			-	-								
SV	74	*****	*****	*****	*****	0	*****	0	*****										
Race: Black																			

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000 New Users		Difference in Risk per 1,000 Person Years										
							Rate per 1,000 Person	Risk per 1,000 New Users											
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	4,731	*****	*****	*****	*****	5.14	*****												
SV	5,990	*****	*****	*****	*****	3.94	*****	1.2	*****	1.30 (0.45, 3.71)	0.628								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	4,182	*****	*****	*****	*****	8	*****												
SV	4,182	*****	*****	*****	*****	3.2	*****	4.8	*****	2.50 (0.49, 12.89)	0.273								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	4,182	*****	*****	*****	*****	5.06	*****												
SV	4,182	*****	*****	*****	*****	4.65	*****	0.4	*****	1.11 (0.36, 3.43)	0.862								
0 - 30 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	4,731	*****	*****	*****	*****	8.81	*****												
SV	5,990	*****	*****	*****	*****	2.11	*****	6.7	*****	4.07 (0.42, 39.15)	0.224								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	4,182	*****	*****	*****	*****	10.26	*****												
SV	4,182	*****	*****	*****	*****	3.42	*****	6.84	*****	3.00 (0.31, 28.84)	0.341								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	4,182	*****	*****	*****	*****	9.96	*****												
SV	4,182	*****	*****	*****	*****	3.01	*****	6.95	*****	3.19 (0.33, 30.63)	0.316								
31 - 60 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	3,528	*****	*****	*****	*****	4.32	*****												
SV	5,447	*****	*****	*****	*****	2.88	*****	1.44	*****	1.59 (0.10, 25.44)	0.743								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	2,863	*****	*****	*****	*****	6.55	*****												
SV	2,863	*****	*****	*****	*****	0	*****	6.55	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	3,123	*****	*****	*****	*****	4.9	*****												
SV	3,840	*****	*****	*****	*****	4.07	*****	0.83	*****	1.28 (0.08, 20.43)	0.862								

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Average Person	Average Person	Rate per 1,000 Person										
							Person	Person	1,000 Person										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	2,191	*****	*****	*****	*****	6.31	*****												
SV	3,141	*****	*****	*****	*****	4.35	*****	1.96	*****	1.47 (0.09, 23.51)	0.785								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	1,029	*****	*****	*****	*****	14.68	*****												
SV	1,029	*****	*****	*****	*****	0	*****	14.68	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	1,925	*****	*****	*****	*****	7.2	*****												
SV	2,243	*****	*****	*****	*****	6.05	*****	1.15	*****	1.21 (0.08, 19.39)	0.892								
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	1,653	*****	*****	*****	*****	0	*****												
SV	2,381	*****	*****	*****	*****	5.26	*****	-5.26	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	613	*****	*****	*****	*****	0	*****												
SV	613	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	1,447	*****	*****	*****	*****	0	*****												
SV	1,727	*****	*****	*****	*****	3.54	*****	-3.54	*****	-	-								
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	939	*****	*****	*****	*****	5.19	*****												
SV	1,080	*****	*****	*****	*****	9.78	*****	-4.59	*****	0.55 (0.05, 6.01)	0.621								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	161	*****	*****	*****	*****	0	*****												
SV	161	*****	*****	*****	*****	36.95	*****	-36.95	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	804	*****	*****	*****	*****	6.04	*****												
SV	824	*****	*****	*****	*****	12.82	*****	-6.77	*****	0.50 (0.05, 5.50)	0.57								
271 - 365 Days																			

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate		Difference		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence Rate per 1,000		Risk per 1,000 Person Years	Difference in Risk per 1,000 Person Years				
							Average Person	Average Number	New Users	New Users				
Site-Adjusted Analysis														
ARB-SV 14-day	658	*****	*****	*****	*****	7.1	*****			7.1	*****	-	-	
SV	663	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ARB-SV 14-day	77	*****	*****	*****	*****	0	*****			0	*****	-	-	
SV	77	*****	*****	*****	*****	0	*****							
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ARB-SV 14-day	567	*****	*****	*****	*****	0	*****			0	*****	-	-	
SV	507	*****	*****	*****	*****	0	*****							

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000		Difference in Risk per 1,000 Person										
							Incidence Rate per 1,000 New Users	Risk per 1,000 Years	New Users										
Race: Pacific Islander																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	45	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	46	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
0 - 30 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	45	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	46	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	29	*****	*****	*****	*****	0	*****	0	*****	-	-								
31 - 60 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	37	*****	*****	*****	*****	0	*****	0	*****	-	-								
SV	43	*****	*****	*****	*****	0	*****	0	*****	-	-								

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Rate per 1,000 New Users		Difference in Risk per 1,000 Person Years		
							Rate per 1,000 New Users	Risk per 1,000 Person Years			
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV 14-day	24	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	24	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV 14-day	25	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	28	*****	*****	*****	*****	0	*****	0	*****	-	-
61 - 90 Days											
Site-Adjusted Analysis											
ARB-SV 14-day	23	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	27	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV 14-day	14	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	17	*****	*****	*****	*****	0	*****	0	*****	-	-
91 - 180 Days											
Site-Adjusted Analysis											
ARB-SV 14-day	13	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	25	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²											
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05											
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****	0	*****	-	-
SV	16	*****	*****	*****	*****	0	*****	0	*****	-	-

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Incidence Rate per 1,000 Person Years		Difference in Risk per 1,000 Person Years										
							1,000 New Users	Risk per New Users	1,000 Person Years										
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	14	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	11	*****	*****	*****	*****	0	*****	0	*****										
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****										
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	*****	*****	*****	*****	*****	0	*****			-	-								
SV	*****	*****	*****	*****	*****	0	*****	0	*****										
Race: White																			
Overall																			
Site-Adjusted Analysis																			
ARB-SV 14-day	23,785	*****	*****	*****	*****	3.3	*****												
SV	30,376	*****	*****	*****	*****	1.09	*****	2.21	*****	3.14 (1.59, 6.19)	<0.001								

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence		Rate		Difference		Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹
							Incidence Rate per 1,000 Person	Incidence Rate per 1,000 New Users	Difference in Risk per 1,000 Person	Risk per 1,000 New Users				
							1,000 Person Years	1,000 New Users Years	1,000 Person	1,000 New Users				
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ARB-SV 14-day	22,086	*****	*****	*****	*****	4.62	*****						3.17 (1.26, 7.93)	0.014
SV	22,086	*****	*****	*****	*****	1.46	*****	3.16	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ARB-SV 14-day	22,086	*****	*****	*****	*****	3.54	*****						3.75 (1.70, 8.25)	0.001
SV	22,086	*****	*****	*****	*****	0.97	*****	2.58	*****					
0 - 30 Days														
Site-Adjusted Analysis														
ARB-SV 14-day	23,785	*****	*****	*****	*****	4.59	*****						3.70 (0.98, 13.96)	0.053
SV	30,376	*****	*****	*****	*****	1.24	*****	3.35	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ARB-SV 14-day	22,086	*****	*****	*****	*****	5.09	*****						4.00 (0.85, 18.84)	0.08
SV	22,086	*****	*****	*****	*****	1.27	*****	3.82	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ARB-SV 14-day	22,086	*****	*****	*****	*****	4.94	*****						4.34 (0.92, 20.43)	0.064
SV	22,086	*****	*****	*****	*****	1.14	*****	3.8	*****					
31 - 60 Days														
Site-Adjusted Analysis														
ARB-SV 14-day	18,488	*****	*****	*****	*****	4.75	*****						2.98 (0.75, 11.93)	0.122
SV	27,717	*****	*****	*****	*****	1.6	*****	3.15	*****					
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²														
ARB-SV 14-day	15,838	*****	*****	*****	*****	5.43	*****						5.00 (0.58, 42.80)	0.142
SV	15,838	*****	*****	*****	*****	1.09	*****	4.34	*****					
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05														
ARB-SV 14-day	17,208	*****	*****	*****	*****	5.1	*****						7.05 (0.85, 58.55)	0.071
SV	20,332	*****	*****	*****	*****	0.72	*****	4.37	*****					

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Year	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Average Person	Average Person	Rate per 1,000 Person										
							Person	Person	1,000 Person										
61 - 90 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	12,635	*****	*****	*****	*****	4.27	*****												
SV	18,438	*****	*****	*****	*****	1.44	*****	2.83	*****	2.99 (0.55, 16.35)	0.206								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	7,333	*****	*****	*****	*****	5.97	*****												
SV	7,333	*****	*****	*****	*****	0	*****	5.97	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	11,797	*****	*****	*****	*****	4.57	*****												
SV	13,673	*****	*****	*****	*****	0.96	*****	3.61	*****	4.75 (0.53, 42.46)	0.164								
91 - 180 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	10,156	*****	*****	*****	*****	3.08	*****												
SV	15,150	*****	*****	*****	*****	1.12	*****	1.96	*****	2.70 (0.67, 10.79)	0.16								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	4,880	*****	*****	*****	*****	4.34	*****												
SV	4,880	*****	*****	*****	*****	2.9	*****	1.45	*****	1.50 (0.25, 8.98)	0.657								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	9,486	*****	*****	*****	*****	3.31	*****												
SV	11,393	*****	*****	*****	*****	1.49	*****	1.82	*****	2.22 (0.55, 8.88)	0.26								
181 - 270 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	6,454	*****	*****	*****	*****	1.52	*****												
SV	8,260	*****	*****	*****	*****	0	*****	1.52	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	1,738	*****	*****	*****	*****	0	*****												
SV	1,738	*****	*****	*****	*****	0	*****	0	*****	-	-								
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	6,006	*****	*****	*****	*****	1.63	*****												
SV	6,300	*****	*****	*****	*****	0	*****	1.63	*****	-	-								

Table 19. Effect Estimates for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, and Risk of Angioedema in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020 by Analysis Type, Race and Risk Window

Medical Product	Number of New Users	Person Years at Risk	Average Days at Risk	Average Years at Risk	Number of Events	Rate per Person Years	Incidence			Hazard Ratio (95% Confidence Interval) ¹	Wald P-Value ¹								
							Rate per 1,000		Difference in Risk per 1,000 Person										
							Incidence Rate per 1,000 New Users	Difference in Risk per 1,000 New Users	Hazard Ratio (95% Confidence Interval) ¹										
271 - 365 Days																			
Site-Adjusted Analysis																			
ARB-SV 14-day	4,514	*****	*****	*****	*****	1.02	*****	0.1	*****	1.11 (0.07, 17.75)	0.941								
SV	5,163	*****	*****	*****	*****	0.92	*****												
Fixed Ratio 1:1 Propensity Score Matched Conditional Analysis; Caliper= 0.05²																			
ARB-SV 14-day	781	*****	*****	*****	*****	0	*****	-7	*****	-	-								
SV	781	*****	*****	*****	*****	7	*****												
Fixed Ratio 1:1 Propensity Score Matched Unconditional Analysis; Caliper= 0.05																			
ARB-SV 14-day	4,186	*****	*****	*****	*****	1.1	*****	-0.08	*****	0.94 (0.06, 15.00)	0.964								
SV	3,984	*****	*****	*****	*****	1.18	*****												

¹Data presented by a dash are unable to be calculated. This table may not use all data representations.

²Conditional 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.

Figure 1a. Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

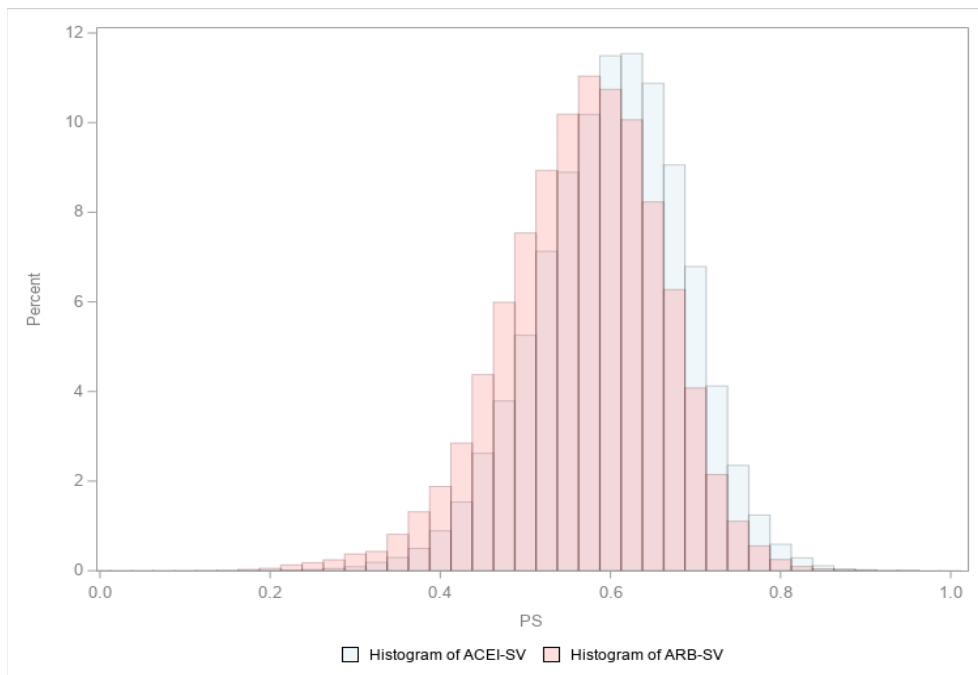


Figure 1b. Histogram of Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05 Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

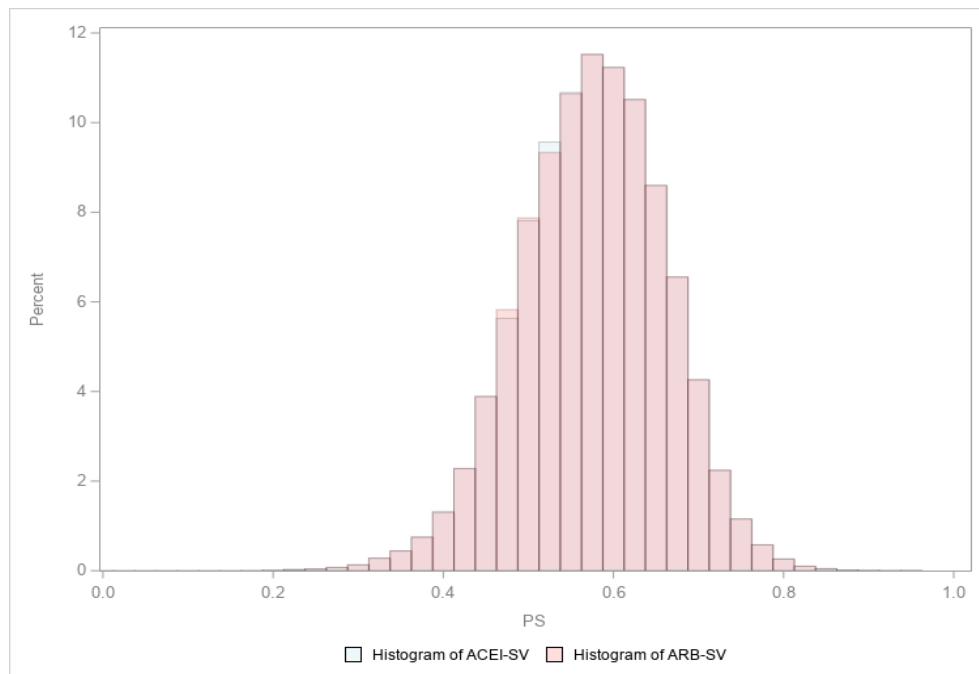


Figure 2a. Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

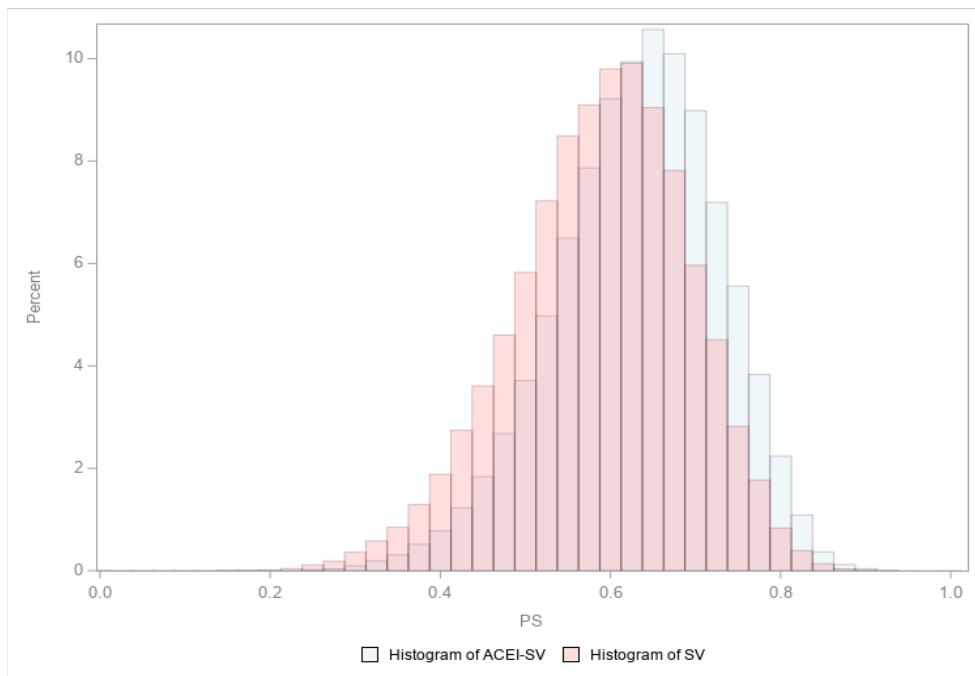


Figure 2b. Histogram of Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

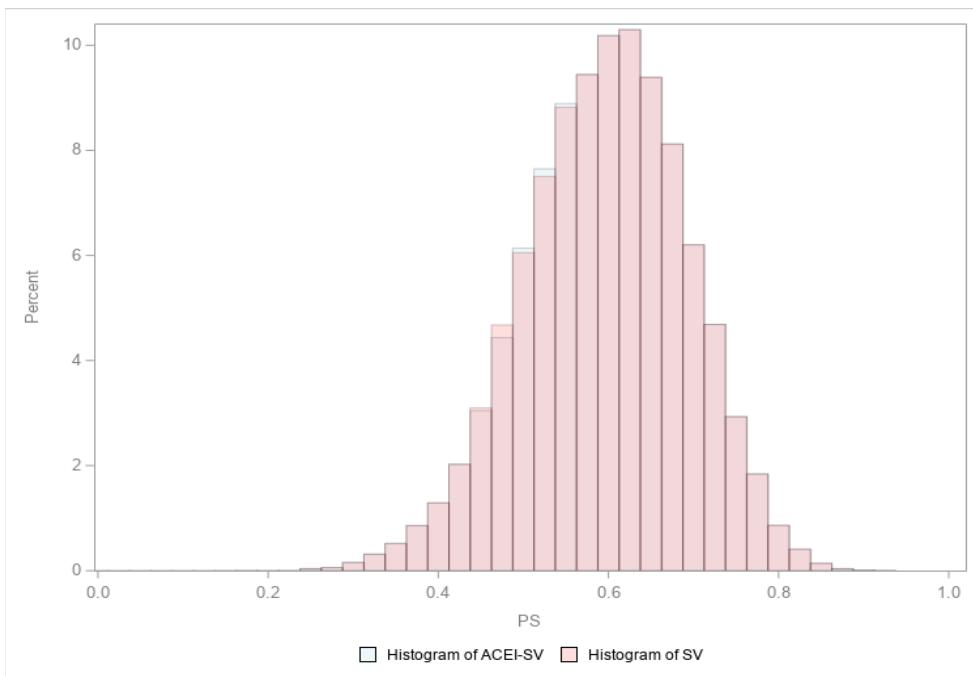


Figure 3a. Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

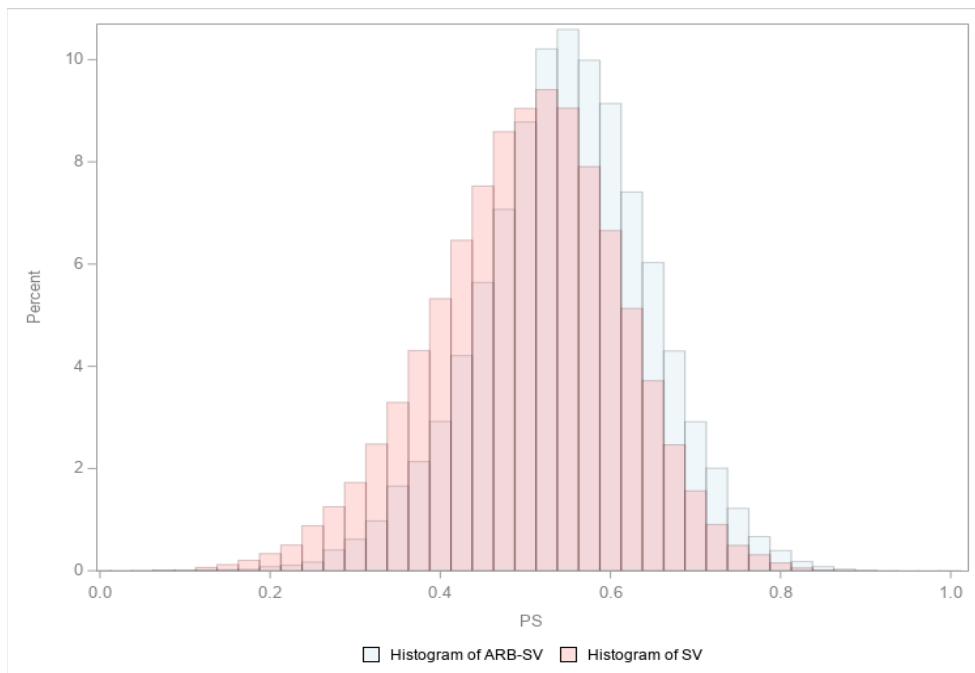


Figure 3b. Histogram for Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

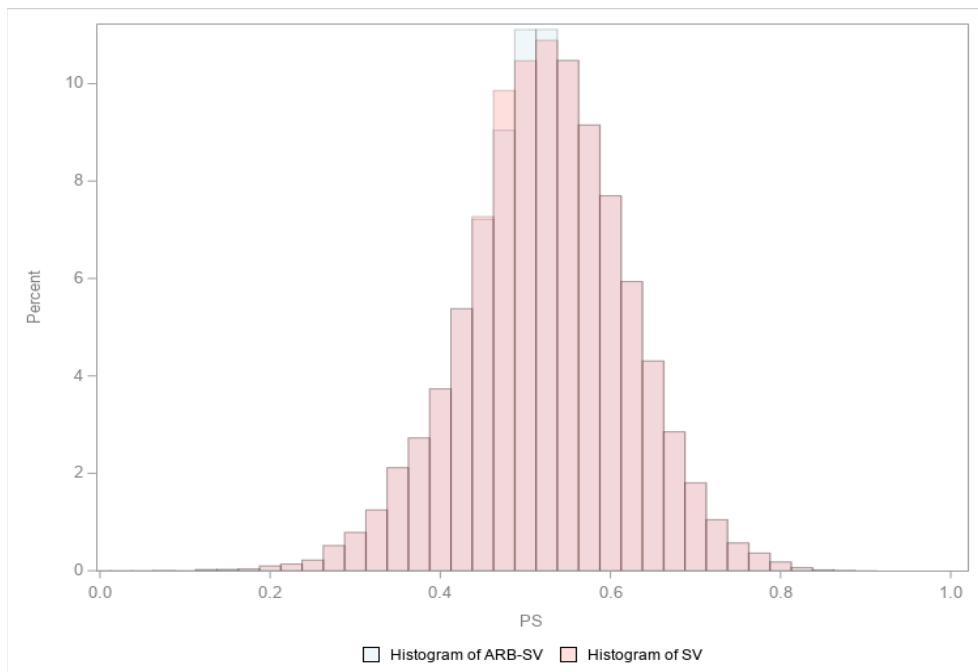


Figure 4a. Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

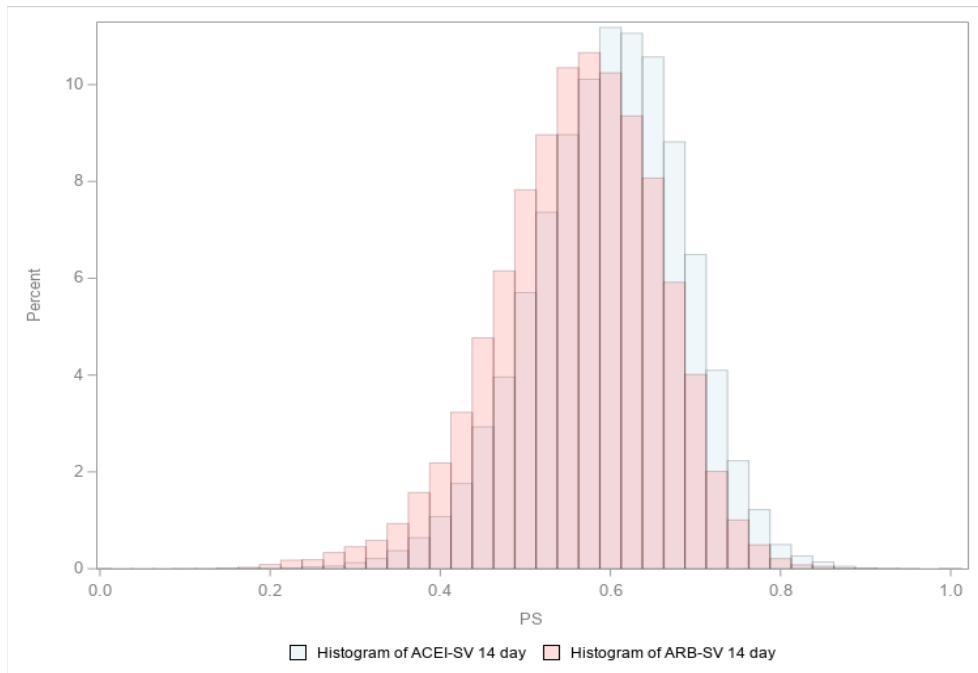


Figure 4b. Histogram for Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

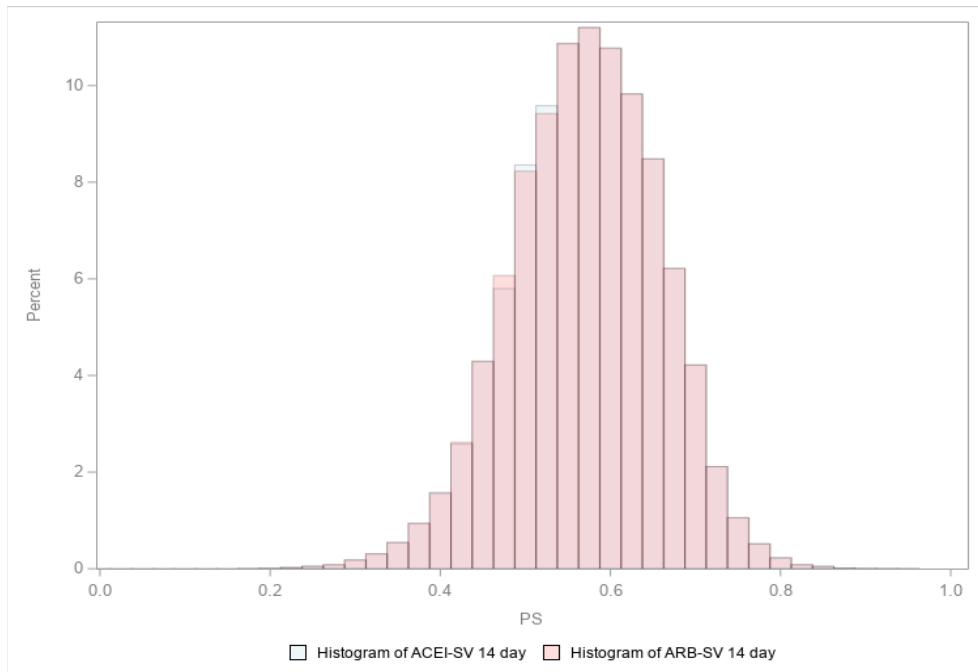


Figure 5a. Histogram of Propensity Score (PS) Distribution, Before Adjustment, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

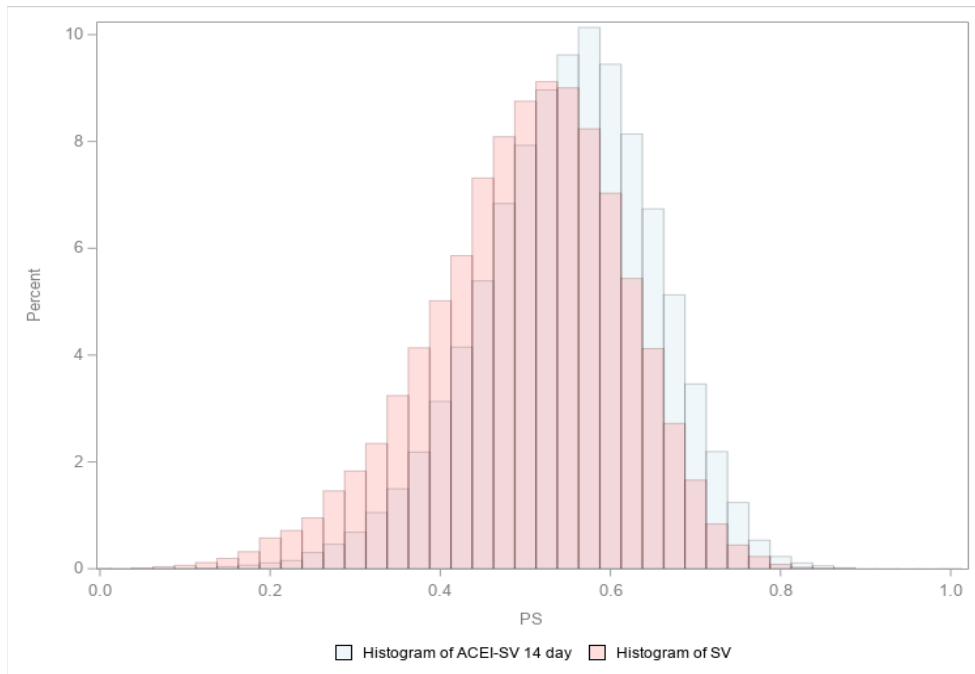


Figure 5b. Histogram for Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

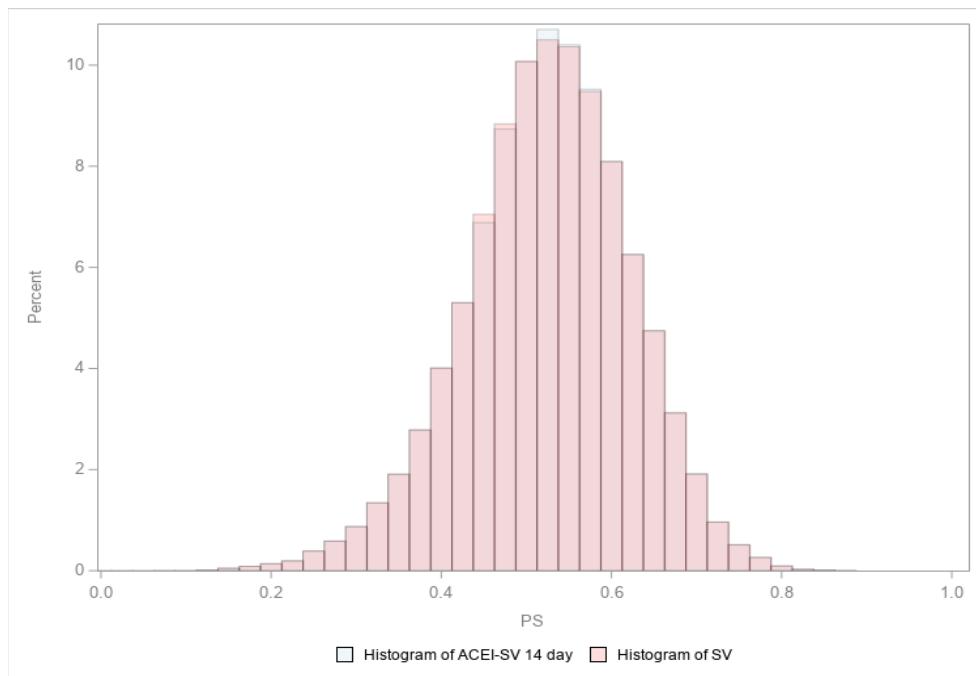


Figure 6a. Histogram of Propensity Score (PS) Distribution, Before Adjustment Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

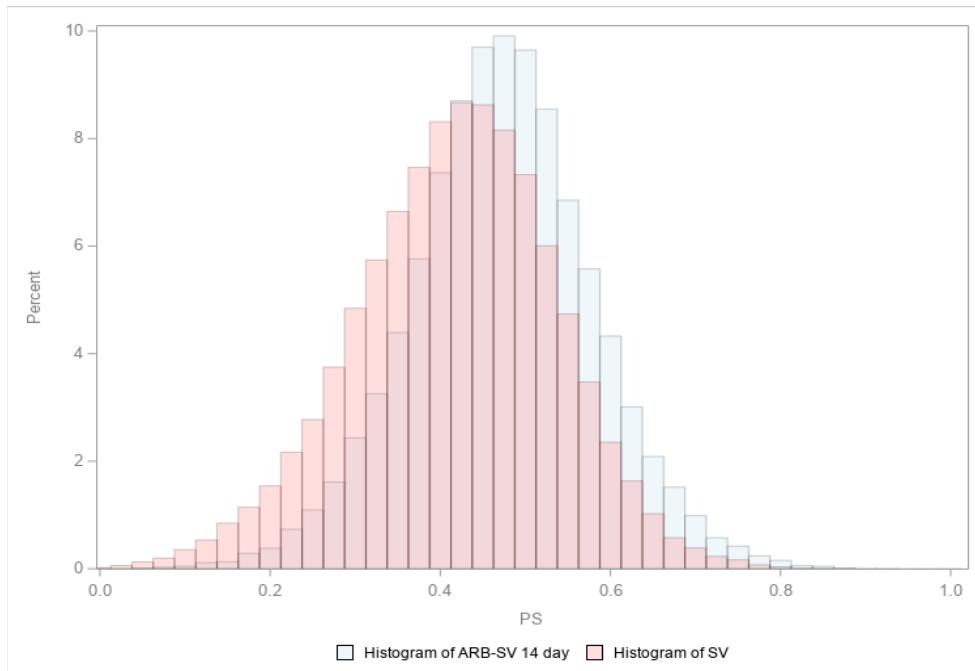


Figure 6b. Histogram of Propensity Score (PS) Fixed Ratio 1:1 Aggregated Adjusted Cohort, Matched Caliper = 0.05, Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

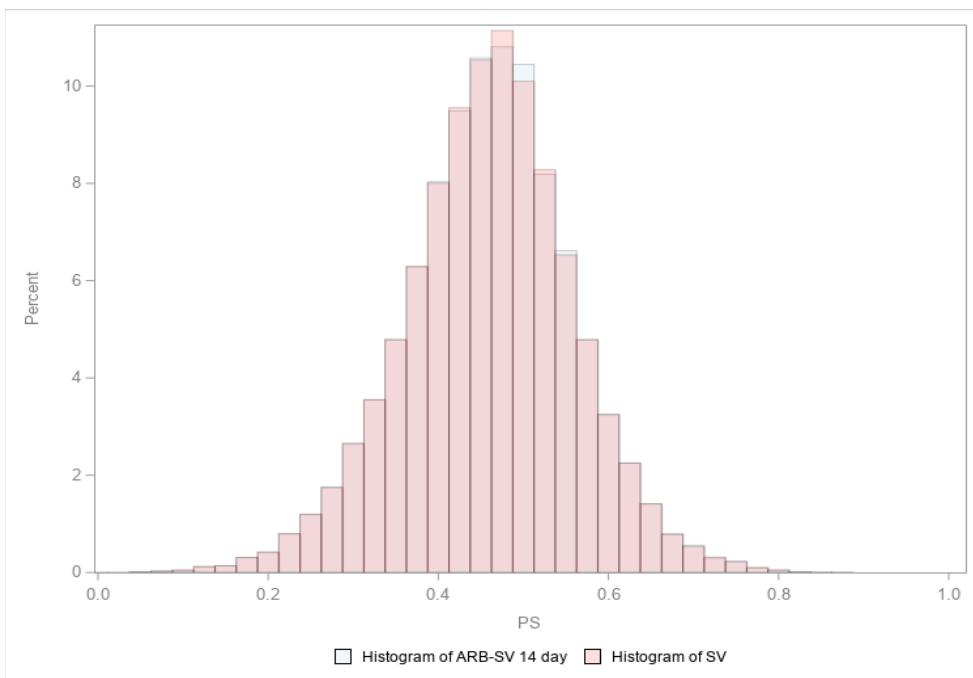


Figure 7a. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall

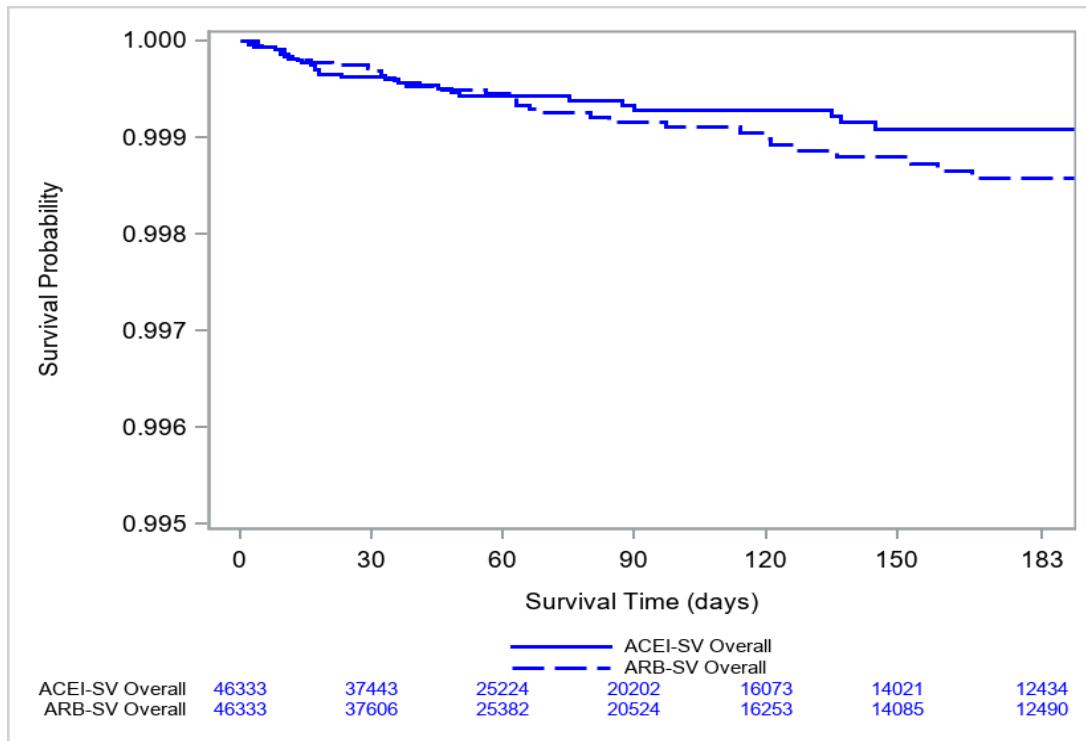


Figure 7b. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

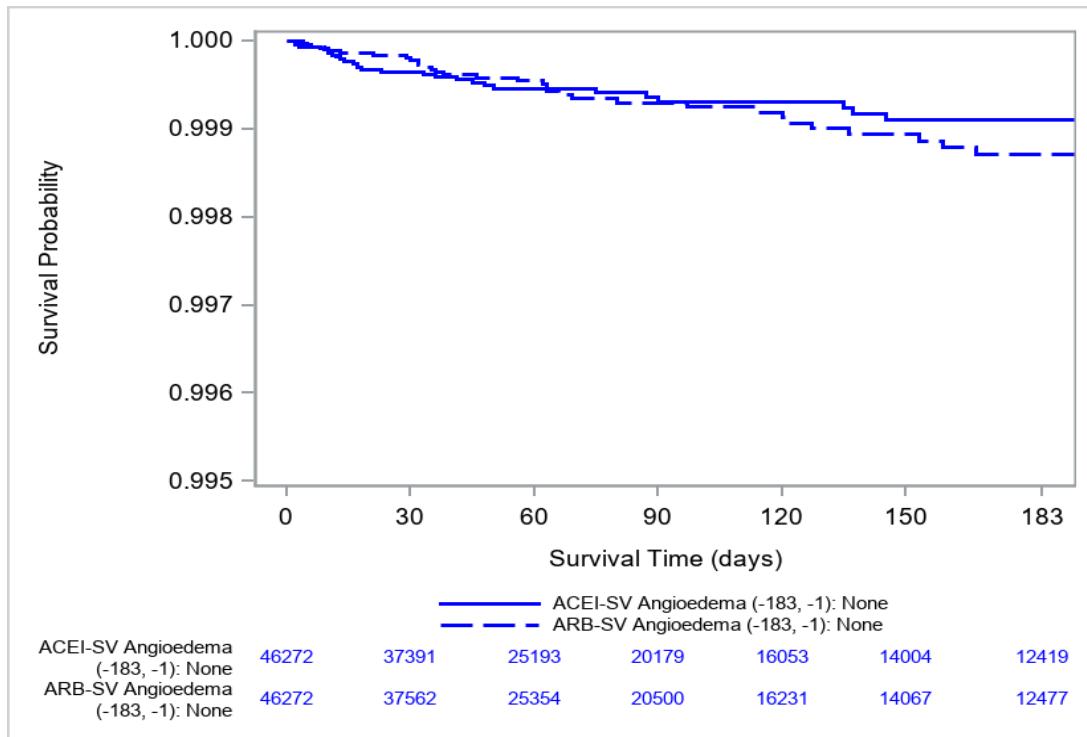


Figure 8a. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall

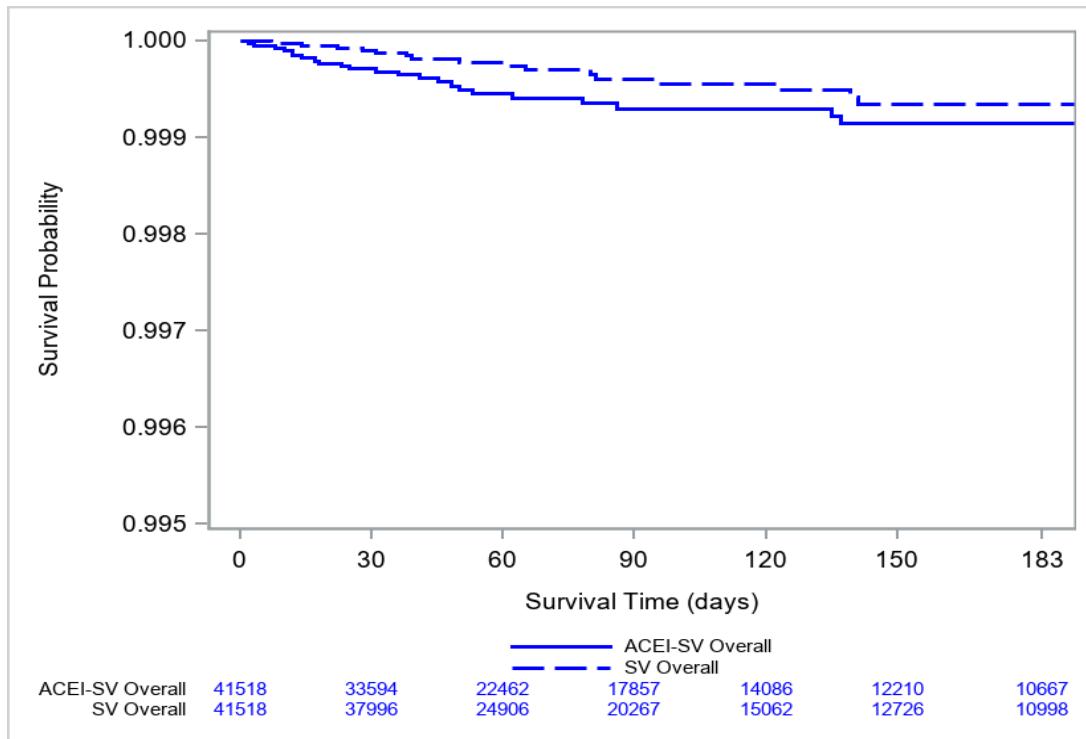


Figure 8b. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 183 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

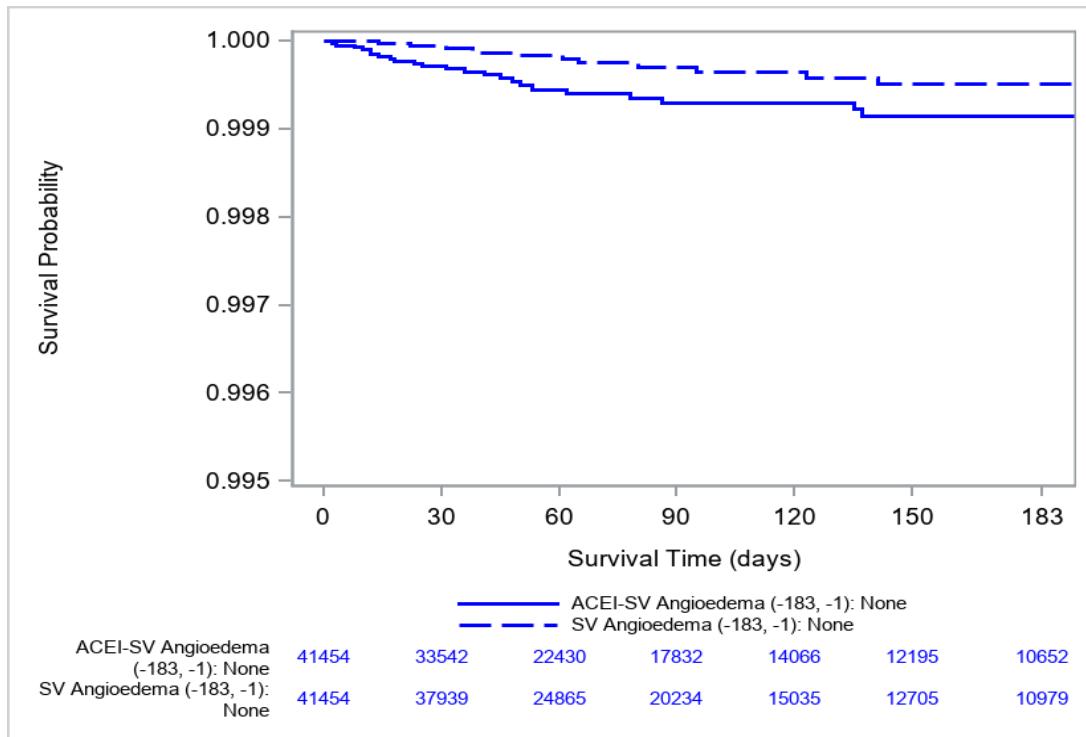


Figure 9a. Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall

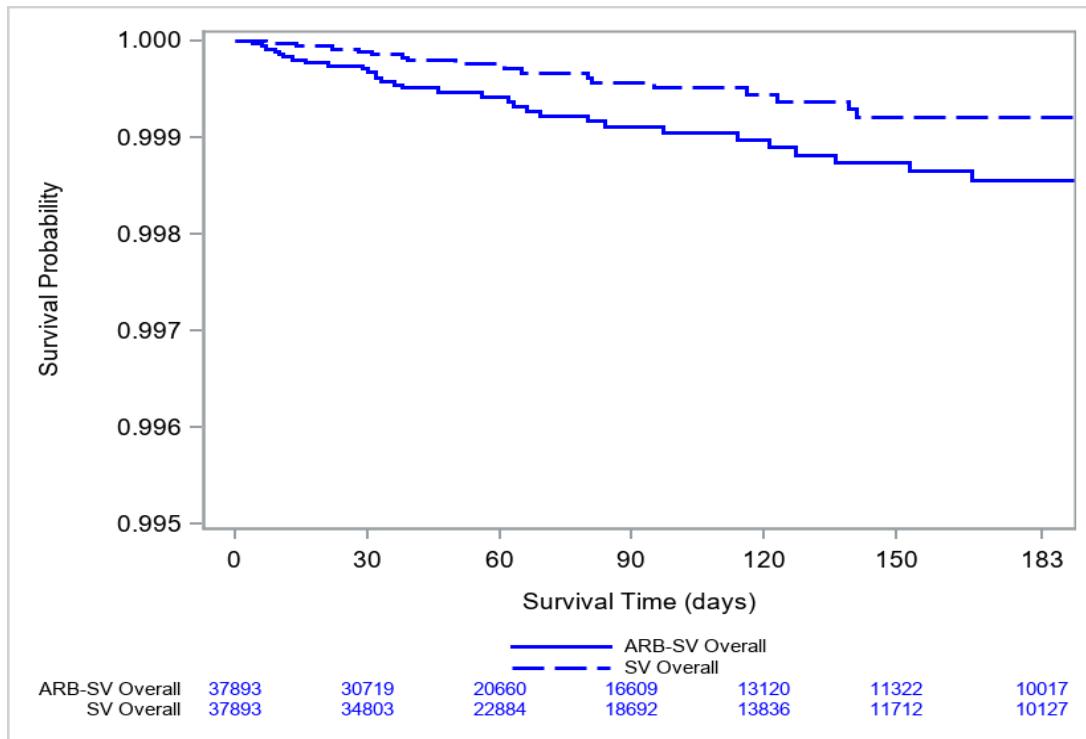


Figure 9b. Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 183 Days Prior, and New Initiators of SV, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

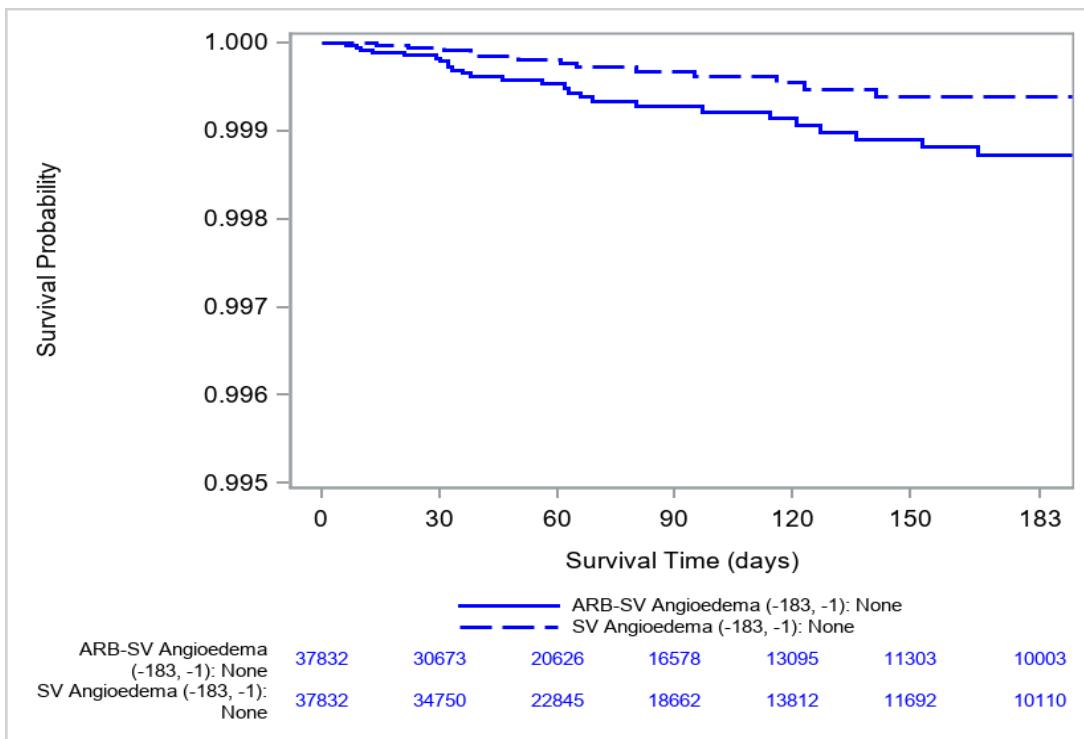


Figure 10a. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall

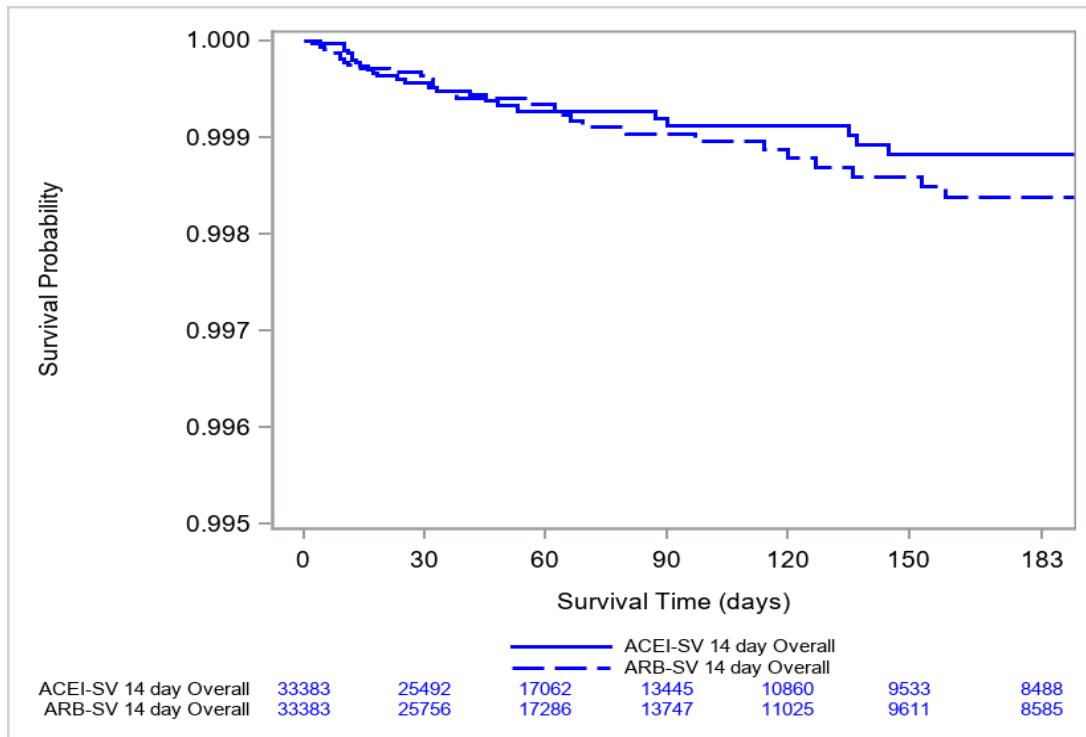


Figure 10b. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

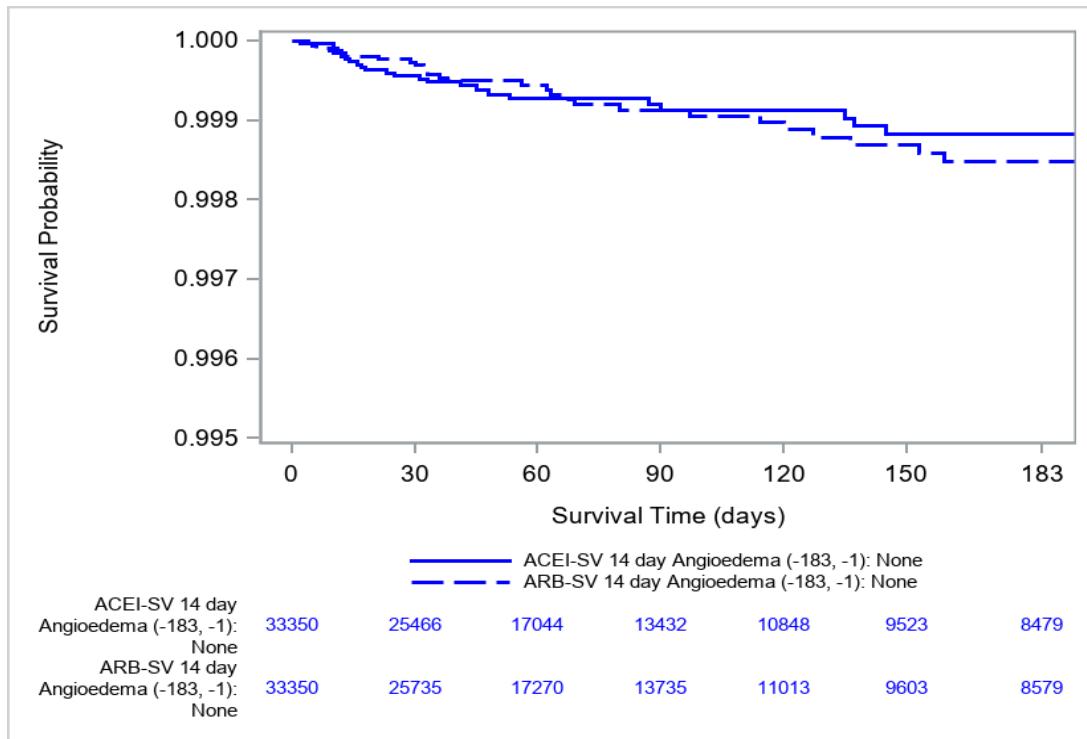


Figure 11a. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall

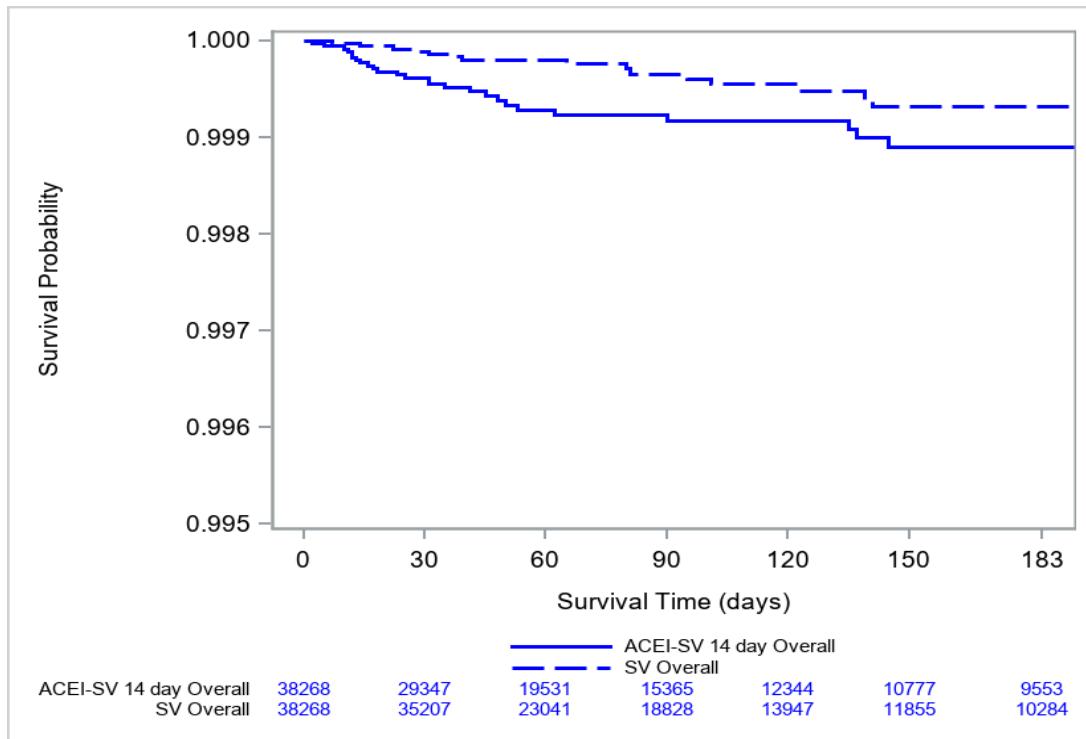


Figure 11b. Kaplan Meier Survival Curves for Risk of Angioedema Comparing New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin-Converting Enzyme Inhibitors (ACEI) in the 14 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020

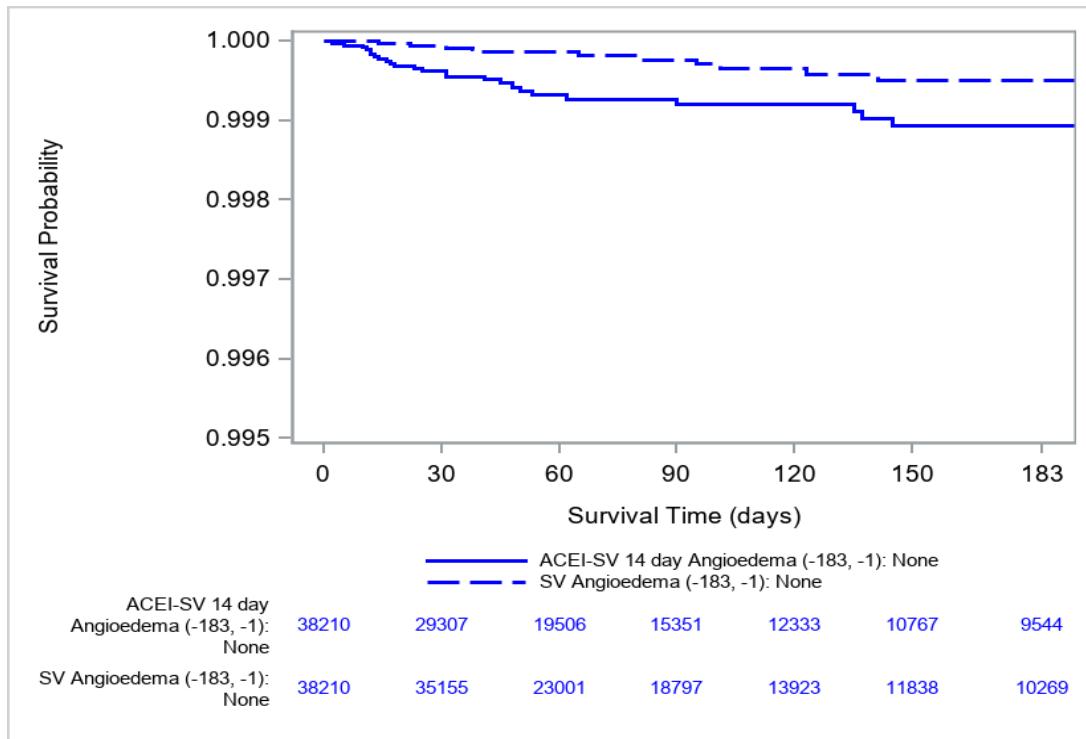


Figure 12a. Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, Unconditional Propensity Score Matched Cohort in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020, Overall

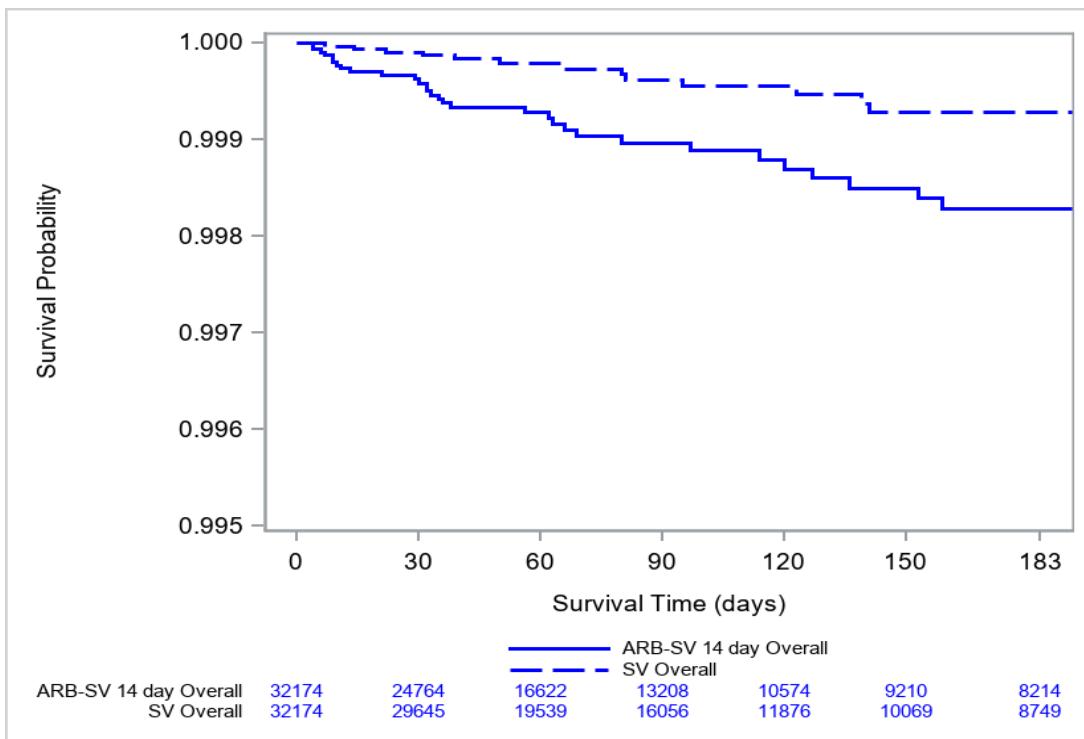
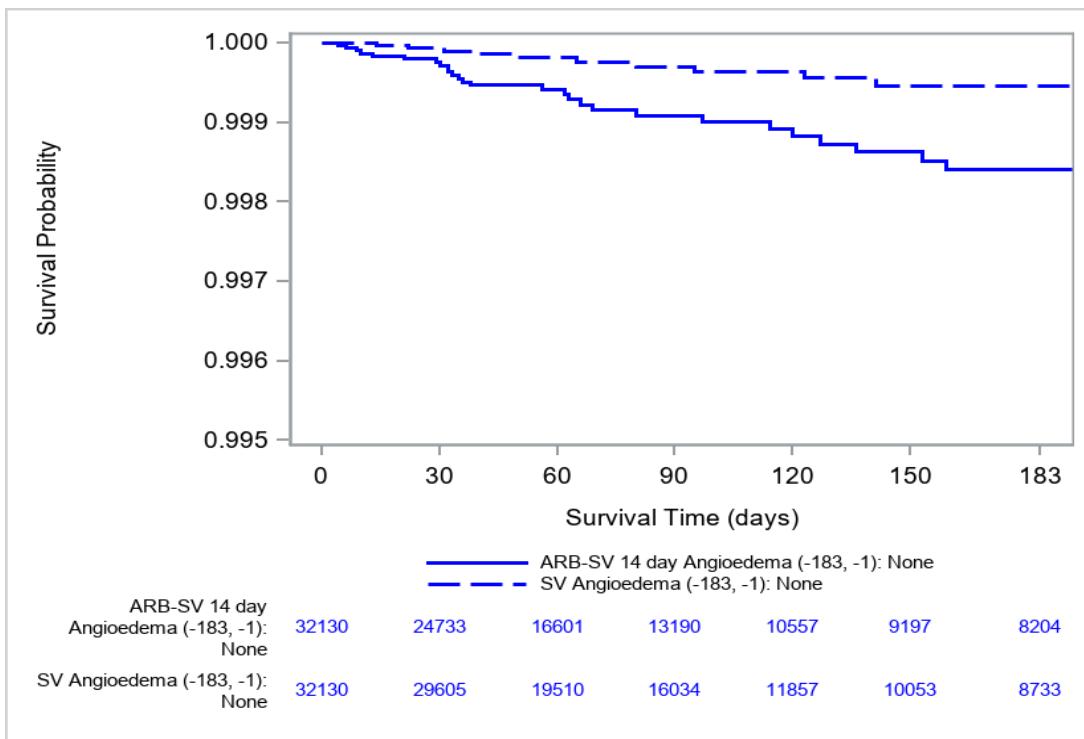


Figure 12b. Kaplan Meier Survival Curves for Risk of Angioedema Comparing for New Initiators of Sacubitril/Valsartan (SV) with Use of Angiotensin II Receptor Blockers (ARB) in the 14 Days Prior, and New Initiators of SV, No Prior Angioedema (-183, -1) in the Sentinel Distributed Database (SDD) between July 7, 2015 and February 29, 2020



Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (January 18, 2022)

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

¹The start and end dates are based on available data at the time of cder_mpl2p_wp021_nsdp_v01 query execution

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

Generic Name	Brand Name
	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) Codes Used to Define Outcomes in this Request

Code	Description	Code Category	Code Type
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 Inclusion and Exclusion Criteria in this Request

Generic Name	Brand Name
Angiotensin-Converting Enzyme Inhibitors (ACEI)	
AMLODIPINE BESYLATE/BENAZEPRIL HCL	Lotrel amlodipine-benazepril
AMLODIPINE BESYLATE/BENAZEPRIL HCL	
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)	
AMLODIPINE BESYLATE/OLMESARTAN MEDOXOMIL	Azor
AMLODIPINE BESYLATE/OLMESARTAN MEDOXOMIL	amlodipine-olmesartan

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

Generic Name
Brand Name

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	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-amldipin-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-amldipine
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
losartan potassium	losartan
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide

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

Generic Name	Brand Name
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 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 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
I50.30	Unspecified 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
I50.31	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
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

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
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
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

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
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
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

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
T78.04XA	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
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 medicament properly administered	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
T88.6XXA	Anaphylactic reaction due to adverse effect of correct drug or medicament properly administered, initial encounter	Diagnosis	ICD-10-CM
T88.6XXD	Anaphylactic reaction due to adverse effect of correct drug or medicament properly administered, subsequent encounter	Diagnosis	ICD-10-CM
T88.6XXS	Anaphylactic reaction due to adverse effect of correct drug or medicament 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	Diagnosis	ICD-10-CM
Z88.2	Allergy status to sulfonamides	Diagnosis	ICD-10-CM
Z88.3	Allergy status to other anti-infective agents	Diagnosis	ICD-10-CM
Z88.4	Allergy status to anesthetic agent	Diagnosis	ICD-10-CM
Z88.5	Allergy status to narcotic agent	Diagnosis	ICD-10-CM
Z88.6	Allergy status to analgesic agent	Diagnosis	ICD-10-CM
Z88.7	Allergy status to serum and vaccine	Diagnosis	ICD-10-CM
Z88.8	Allergy status to other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
Z88.9	Allergy status to unspecified drugs, medicaments and biological substances	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

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
Angioedema			
995.1	Angioneurotic edema not elsewhere classified	Diagnosis	ICD-9-CM
T783XXA	Angioneurotic edema, initial encounter	Diagnosis	ICD-10-CM
T783XXD	Angioneurotic edema, subsequent encounter	Diagnosis	ICD-10-CM
T783XXS	Angioneurotic edema, sequela	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
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

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
250.7	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
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 durometer or 3/16 inch material of Shore A 40 durometer (or higher), prefabricated, each	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 shaping material, custom fabricated, each	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

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
E10.21	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
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

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
E10.3493	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
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
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

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
E10.37X1	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
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

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
E11.3292	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
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

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
E11.3523	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 rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous 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

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
E11.59	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
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

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
E13.3319	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
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
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

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
E13.3541	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
E13.3553	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E13.3559	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E13.3591	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3592	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3593	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3599	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E13.37X1	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E13.37X2	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E13.37X3	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E13.37X9	Other specified diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E13.40	Other specified diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E13.41	Other specified diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E13.42	Other specified diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E13.43	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E13.44	Other specified diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E13.49	Other specified diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E13.59	Other specified diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E13.618	Other specified diabetes mellitus with other diabetic arthropathy	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
E13.620	Other specified diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E13.621	Other specified diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E13.622	Other specified diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E13.628	Other specified diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E13.630	Other specified diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E13.638	Other specified diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E13.641	Other specified diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E13.649	Other specified diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E13.65	Other specified diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.69	Other specified diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E13.8	Other specified diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E13.9	Other specified diabetes mellitus without complications	Diagnosis	ICD-10-CM
G0108	Diabetes outpatient self-management training services, individual, per 30 minutes	Procedure	HCPCS
G0109	Diabetes outpatient self-management training services, group session (two or more), per 30 minutes	Procedure	HCPCS
G0245	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 consists of at least the following elements: (a) visual inspection of the forefoot, hindfoot, and toe web spaces, (b) evaluation of a protective sensation, (c) evaluation of foot structure and biomechanics, (d) evaluation of vascular status and skin integrity, and (e) evaluation and recommendation of footwear, and (4) patient education	Procedure	HCPCS
G0246	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: (a) visual inspection of the forefoot, hindfoot, and toe web spaces, (b) evaluation of protective sensation, (c) evaluation of foot structure and biomechanics, (d) evaluation of vascular status and skin integrity, and (e) evaluation and recommendation of footwear, and (3) patient education	Procedure	HCPCS
G0247	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 following, if present: (1) local care of superficial wounds, (2) debridement of corns and calluses, and (3) trimming and debridement of nails	Procedure	HCPCS
G8015	Diabetic patient with most recent hemoglobin A1c level (within the last 6 months) documented as greater than 9%	Procedure	HCPCS
G8016	Diabetic patient with most recent hemoglobin A1c level (within the last 6 months) documented as less than or equal to 9%	Procedure	HCPCS
G8017	Clinician documented that diabetic patient was not eligible candidate for hemoglobin A1c measure	Procedure	HCPCS
G8018	Clinician has not provided care for the diabetic patient for the required time for hemoglobin A1c measure (6 months)	Procedure	HCPCS
G8019	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
G8020	Diabetic patient with most recent low-density lipoprotein (within the last 12 months) documented as less than 100 mg/dl	Procedure	HCPCS
G8021	Clinician documented that diabetic patient was not eligible candidate for low-density lipoprotein measure	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
G8022	Clinician has not provided care for the diabetic patient for the required time for low-density lipoprotein measure (12 months)		Procedure	HCPCS
G8023	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
G8024	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
G8025	Clinician documented that the diabetic patient was not eligible candidate for blood pressure measure		Procedure	HCPCS
G8026	Clinician has not provided care for the diabetic patient for the required time for blood pressure measure (within the last 6 months)		Procedure	HCPCS
G8332	Clinician has not provided care for the diabetic retinopathy patient for the required time for macular edema and retinopathy measurement		Procedure	HCPCS
G8333	Patient documented to have had findings of macular or fundus exam communicated to the physician managing the diabetes care		Procedure	HCPCS
G8334	Documentation of findings of macular or fundus exam not communicated to the physician managing the patient's ongoing diabetes care		Procedure	HCPCS
G8335	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
G8336	Clinician has not provided care for the diabetic retinopathy patient for the required time for physician communication measurement		Procedure	HCPCS
G8385	Diabetic patients with no documentation of hemoglobin A1c level (within the last 12 months)		Procedure	HCPCS
G8386	Diabetic patients with no documentation of low-density lipoprotein (within the last 12 months)		Procedure	HCPCS
G8390	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

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
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
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

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
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
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

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
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
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

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
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
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
acldinium 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	Lastacaft
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	betameth ac,sodphos(PF)-water
water/PF	
betamethasone acetate and sodium	Betaloan SUIK
phosph/norflurane/HFC 245fa	
betamethasone acetate and sodium	Pod-Care 100CG
phosph/norflurane/HFC 245fa	
betamethasone acetate/betamethasone sodium	Beta-1
phosphate	
betamethasone acetate/betamethasone sodium	Celestone Soluspan
phosphate	
betamethasone acetate/betamethasone sodium	Pod-Care 100C
phosphate	
betamethasone acetate/betamethasone sodium	ReadySharp Betamethasone
phosphate	
betamethasone acetate/betamethasone sodium	betamethasone acet,sod phos
phosphate	
betamethasone acetate/betamethasone sodium	betamethasone ace,sodphos-wtr
phosphate/water	
betamethasone sodium phosph in sterile water for	betamethasone sodphosph-water
injection	
brompheniramine maleate	J-TAN PD
brompheniramine maleate	brompheniramine maleate(bulk)

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

Generic Name	Brand Name
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	Trebrom
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 DMCold-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
brompheniramine maleate/phenylephrine HCl/dextromethorphan	RelCof DM

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

Generic Name	Brand Name
brompheniramine maleate/phenylephrine	Rynex DM
HCl/dextromethorphan	Tussi Pres-B
brompheniramine maleate/phenylephrine	
HCl/dextromethorphan	
brompheniramine maleate/phenylephrine	Wal-tap DM
HCl/dextromethorphan	
brompheniramine maleate/phenylephrine	brompheniramin-phenylephrin-DM
HCl/dextromethorphan	
brompheniramine maleate/pseudoephedrine	Atuss DA
HCl/chlophedianol	
brompheniramine maleate/pseudoephedrine	brompheniramine-pseudoeph-DM
HCl/dextromethorphan	
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
cetirizine HCl/pseudoephedrine HCl	cetirizine-pseudoephedrine
chlophedianol HCl/guaifenesin	Chlo Tuss EX
chlophedianol HCl/guaifenesin	Vanacof G

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

Generic Name	Brand Name
chllophedianol HCl/guaifenesin	chllophedianol-guaifenesin
chlorcyclizine HCl	Ahist (chlorcyclizine)
chlorcyclizine HCl/codeine phosphate	Poly-Tussin
chlorcyclizine HCl/phenylephrine HCl	Dallery (chlorcyclizine-PE)
chlorcyclizine HCl/pseudoephedrine HCl	Nasopen
chlorcyclizine HCl/pseudoephedrine HCl	Stahist AD
chlorcyclizine HCl/pseudoephedrine	Biclora-D
HCl/chlophedianol HCl	
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	Pharbechilar
chlorpheniramine maleate	Wal-Finate
chlorpheniramine maleate	chlorpheniramine maleate
chlorpheniramine maleate/codeine phosphate	Cedar 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)
chlorpheniramine maleate/phenylephrine	Carbaphen CH
HCl/chlophedianol HCl	
chlorpheniramine maleate/phenylephrine	Carbaphen Ped CH
HCl/chlophedianol HCl	

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

Generic Name	Brand Name
chlorpheniramine maleate/phenylephrine	ExaPhen CH
HCl/chlophedianol HCl	
chlorpheniramine maleate/phenylephrine	Phenagil CH
HCl/chlophedianol HCl	
chlorpheniramine maleate/phenylephrine	CapCof
HCl/codeine phosphate	
chlorpheniramine maleate/phenylephrine	Maxi-Tuss CD
HCl/codeine phosphate	
chlorpheniramine maleate/phenylephrine	Bio-Rytuss
HCl/dextromethorphan	
chlorpheniramine maleate/phenylephrine	Maxichlor PEH DM
HCl/dextromethorphan	
chlorpheniramine maleate/phenylephrine	Advil Allergy-Congestion Rlf
HCl/ibuprofen	
chlorpheniramine maleate/phenylephrine	Cold Relief
bitartrate/aspirin	
chlorpheniramine maleate/phenylephrine	Cold Relief Plus
bitartrate/aspirin	
chlorpheniramine maleate/pseudoephedrine	Tricode AR
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Zodryl DAC 25
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Zodryl DAC 30
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Zodryl DAC 35
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Zodryl DAC 40
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Zodryl DAC 50
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Zodryl DAC 60
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Zodryl DAC 80
HCl/codeine	
chlorpheniramine maleate/pseudoephedrine	Advil Allergy Sinus
HCl/ibuprofen	
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
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

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

Generic Name	Brand Name
cortisone acetate	cortisone
cromolyn sodium	Nasal Allergy SymptomControl
cromolyn sodium	cromolyn
cyproheptadine HCl	cyproheptadine
cyproheptadine HCl	cyproheptadine (bulk)
deflazacort	Emflaza
desloratadine	Clarinex
desloratadine	desloratadine
desloratadine/pseudoephedrine sulfate	Clarinex-D 12 HOUR
desloratadine/pseudoephedrine sulfate	Clarinex-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
dextromethorphan-pseudoephedrine	M-End DMX
-dextromethorphan	Ala-Hist IR
dextromethorphanamine maleate	Pediavent
dextromethorphanamine maleate	Chlo Hist
dextromethorphanamine maleate/chlophedianol HCl	Ala-Hist PE
dextromethorphanamine maleate/phenylephrine HCl	Dallergy(dextromethorphan-PE)
dextromethorphanamine maleate/phenylephrine HCl	dextromethorphanamine-phenyleph
dextromethorphanamine maleate/pseudoephedrine HCl	Acticon (dextromethorphan-pse)
dextromethorphanamine maleate/pseudoephedrine HCl/codeine phos	M-End Max D

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

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

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

Generic Name	Brand Name
dextromethorphan	Nite-Time Cold-Flu
HBr/acetaminophen/doxylamine	Nitetime Multi-Symptom
dextromethorphan	
HBr/acetaminophen/doxylamine	Robitussin Cold-Flu Night
dextromethorphan	
HBr/acetaminophen/doxylamine	Vicks Nature Fusion Cold-Flu
dextromethorphan	
HBr/acetaminophen/doxylamine	Vicks NyQuil Cold/FluLiquicap
dextromethorphan	
HBr/acetaminophen/doxylamine	Vicks Nyquil Nighttime Relief
dextromethorphan	
HBr/acetaminophen/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	Cold Head CongestionDaytime
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Cold Multi-Symptom
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Cold-Flu Relief
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Day Multi-Symp Flu-SevereCold
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Day Time PE
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	DayTime
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Daytime Cold
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Daytime Cold-Flu
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Daytime Cold-Flu Relief (PE)
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Flu Relief Therapy Daytime
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Flu-Severe Cold-CoughDaytime
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	HerbioMed Body Aches-SinusM-S
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Mapap Cold Formula
HCl/acetaminophen	
dextromethorphan HBr/phenylephrine	Mucinex Fast-MaxCongest-Head
HCl/acetaminophen	

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

Generic Name	Brand Name
dextromethorphan HBr/phenylephrine	Mucinex Fast-MaxSevCold-Sinus
HCl/acetaminophen	Robitussin Cold-Flu Day
dextromethorphan HBr/phenylephrine	Sudafed PEPressure-Pain-Cough
HCl/acetaminophen	Theraflu ExpressMax ColdDay
dextromethorphan HBr/phenylephrine	Theraflu Multi-Symptom Cold
HCl/acetaminophen	Tylenol Cold Max Day
dextromethorphan HBr/phenylephrine	Tylenol Cold Multi-SymptomDay
HCl/acetaminophen	Vicks DayQuil Cold-Flu Relief
dextromethorphan HBr/phenylephrine	Vicks Nature Fusion
HCl/acetaminophen	Wal-Flu Severe Cold-Cough
dextromethorphan HBr/phenylephrine	Alahist CF
HCl/dexbrompheniramine	Alahist DM
dextromethorphan HBr/phenylephrine	Bionatuss DXP
HCl/dexbrompheniramine	G-P-Tuss DXP
dextromethorphan HBr/phenylephrine	Supress A
HCl/dexbrompheniramine	Alka-Seltzer PlusSin-Allg-Cgh
dextromethorphan	Cold Multi-SymptomNightTime
HBr/phenylephrine/acetaminophen/doxylamine	Cold and Flu Relief Plus (D/N)
dextromethorphan	Cold-Flu Relief, Day/Night
HBr/phenylephrine/acetaminophen/doxylamine	Daytime-Nighttime
dextromethorphan	Daytime-Nighttime Cold-Flu
HBr/phenylephrine/acetaminophen/doxylamine	Mucinex Fast-Max Nite (doxyl)
dextromethorphan	Nite Time Cold-Flu Relief (PE)
HBr/phenylephrine/acetaminophen/doxylamine	Severe Cold and FluNighttime
dextromethorphan	Severe Sinus CongestAlrgy-Cgh
HBr/phenylephrine/acetaminophen/doxylamine	Tylenol Cold Max Night
dextromethorphan	

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

Generic Name	Brand Name
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	HerbioMed Deep Cold-FluNight
/diphenhydramine	
dextromethorphan/phenylephrine/acetaminophen	Multi-Symptom SevereCold-Nt
/diphenhydramine	
dextromethorphan/pseudoephedrine	Alka-Seltzer Plus Cold+Flu
HCl/acetaminophen/doxylamine	
dextromethorphan/pseudoephedrine	Night Time Cold Medicine
HCl/acetaminophen/doxylamine	
dextromethorphan/pseudoephedrine	Night Time Cold-Flu
HCl/acetaminophen/doxylamine	
dextromethorphan/pseudoephedrine	Night Time Cold-Flu Relief
HCl/acetaminophen/doxylamine	
diclofenac sodium	Nite Time
diphenhydramine HCl	
diphenhydramine HCl	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
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

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

Generic Name	Brand Name
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	Allergy M-S Nighttime
diphenhydramine HCl/phenylephrine	Allergy Plus Severe Sinus HA
HCl/acetaminophen	Allergy Sinus Headache (PE)
diphenhydramine HCl/phenylephrine	Allergy and Cold PE
HCl/acetaminophen	Child Delsym Cough+Cold
diphenhydramine HCl/phenylephrine	Children Dimetapp M-SCold-Flu
HCl/acetaminophen	Children's Mucinex NightTime
diphenhydramine HCl/phenylephrine	Cold and FluRelief(diphen-pe)
HCl/acetaminophen	Cough and Severe Cold
diphenhydramine HCl/phenylephrine	Delsym Cough-ColdNightTime
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	Flu Relief Therapy Nighttime
HCl/acetaminophen	Flu and Sore Throat Relief
diphenhydramine HCl/phenylephrine	Flu-Severe Cold-Cough Night
HCl/acetaminophen	Herbiomed Allergy Cold-Sinus
diphenhydramine HCl/phenylephrine	Mucinex Fast-Max NiteCold-Flu
HCl/acetaminophen	Mucinex Sinus-Max NiteCongest
diphenhydramine HCl/phenylephrine	Severe Allergy-SinusHeadache
HCl/acetaminophen	Severe Cold Cough-Flu
diphenhydramine HCl/phenylephrine	Severe Cold PE
HCl/acetaminophen	Theraflu ExpressMax ColdNight
diphenhydramine HCl/phenylephrine	Theraflu Night SevereCold-Cgh
HCl/acetaminophen	Theraflu Nighttime PowerPod
diphenhydramine HCl/phenylephrine	Wal-Dryl Severe Allergy-Sinus
HCl/acetaminophen	Wal-Flu Severe Cold andCough
diphenhydramine HCl/phenylephrine	Wal-phed PE Severe Cold
HCl/acetaminophen	Child Cold-Cough Day-Night
diphenhydramine HCl/phenylephrine	Sinus Relief Max StrDay-Night
HCl/dextromethorphan HBr	Children's M-S ColdDay-Night
diphenhydramine	Daytime-ColdNightime-Cld-Flu
HCl/phenylephrine/acetaminophen/guaifenesin	Mucinex Fast-Max Day-NiteCold
diphenhydramine/phenylephrin/dextromethorph	Mucinex Fast-Max Day-NiteCong
/acetaminophen/GG	Glentuss
diphenhydramine/phenylephrin/dextromethorph	Lortuss DM
/acetaminophen/GG	Poly Hist Forte
diphenhydramine/phenylephrin/dextromethorph	Poly Hist Forte (doxylamine)
/acetaminophen/GG	doxylamine-phenylephrine
doxylamine succ/pseudoephedrine	Lortuss LQ
HCl/dextromethorphan Hbr	Day-Nite Severe Cold-Flu
doxylamine succ/pseudoephedrine	
HCl/dextromethorphan Hbr	
doxylamine succinate/phenylephrine HCl	
doxylamine succinate/phenylephrine HCl	
doxylamine succinate/phenylephrine HCl	
doxylamine succinate/pseudoephedrine HCl	
doxylamine/phenylephrine/dextromethorphan	
/acetaminophen/GG	

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

Generic Name	Brand Name
doxylamine/phenylephrine/dextromethorphan	Mucinex Fast-MaxDay-Nt(doxyl)
/acetaminophen/GG	
doxylamine/phenylephrine/dextromethorphan	Mucinex Sinus-Max Dy-Nt(dxyl)
/acetaminophen/GG	
doxylamine/phenylephrine/dextromethorphan	Severe Cold and Flu(Day/Night)
/acetaminophen/GG	
dupilumab	Dupixent
dphylline	Lufyllin
dphylline	dphylline (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)
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

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

Generic Name	Brand Name
fenofenadine HCl/pseudoephedrine HCl	Wal-Fex D 24 Hour
fenofenadine HCl/pseudoephedrine HCl	fenofenadine-pseudoephedrine
fludrocortisone acetate	fludrocortisone
flunisolide	Aerospan
flunisolide	flunisolide
fluocinolone acetonide/emollient combination	Synalar Cream Kit
no.65	
fluocinolone acetonide/emollient combination	Synalar Ointment Kit
no.65	
fluocinolone acetonide/skin cleanser comb no.28	Synalar TS
fluocinolone acetonide/skin cleanser	Xilapak
no.10/silicone, tape	
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	Trelegy Ellipta
trifénat	
fluticasone furoate/vilanterol trifénatate	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
fluticasone propionate	fluticasone propionate (bulk)
fluticasone propionate, micronized	fluticasone prop, micro (bulk)
fluticasone propionate/emollient combination	Beser Kit
no.65	
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	Ticanase
bicarbonate	
fluticasone propionate/sodium chloride/sodium	Ticaspray
bicarbonate	
formoterol fumarate	Foradil Aerolizer
formoterol fumarate	Perforomist
formoterol fumarate	formoterol fumarate (bulk)
formoterol fumarate dihydrate, micronized	formoterol fum dihyd,mic(bulk)
glycopyrrrolate	Seebri Neohaler

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

Generic Name	Brand Name
glycopyrrolate/formoterol fumarate	Bevespi Aerosphere
glycopyrrolate/nebulizer accessories	Lonhaler Magnair Refill
glycopyrrolate/nebulizer and accessories	Lonhaler 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
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	Guacon DMS
guaifenesin/dextromethorphan HBr	Guaifenesin-DM
guaifenesin/dextromethorphan HBr	Intense Cough
guaifenesin/dextromethorphan HBr	Intense Cough Reliever
guaifenesin/dextromethorphan HBr	Ilophen DM-NR
guaifenesin/dextromethorphan HBr	Medi-Tussin DM
guaifenesin/dextromethorphan HBr	Medi-Tussin DM Diabetic

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

Generic Name	Brand Name
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
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

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

Generic Name	Brand Name
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
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

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

Generic Name	Brand Name
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	Sorbituss
guaifenesin/dextromethorphan	Actinel
HBr/pseudoephedrine HCl	Actinel Pediatric
guaifenesin/dextromethorphan	Ambi 40PSE-400GFN-20DM
HBr/pseudoephedrine HCl	Bionel
guaifenesin/dextromethorphan	Bionel Pediatric
HBr/pseudoephedrine HCl	Capmist DM
guaifenesin/dextromethorphan	Desgen DM(pseudoephedrine)
HBr/pseudoephedrine HCl	Despec-DM(pseudoeph-DM-guaif)
guaifenesin/dextromethorphan	Entex PAC
HBr/pseudoephedrine HCl	Entre-Cough
guaifenesin/dextromethorphan	ExeFen DMX
HBr/pseudoephedrine HCl	Pecgen PSE
guaifenesin/dextromethorphan	Poly-Vent DM
HBr/pseudoephedrine HCl	Robafen CF
guaifenesin/dextromethorphan	TRISPEC PSE
HBr/pseudoephedrine HCl	Tusnel DMPediatric(pseudoeph)
guaifenesin/dextromethorphan	Tusnel New Formula
HBr/pseudoephedrine HCl	Tusnel Pediatric
guaifenesin/dextromethorphan	Tussin CF
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

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

Generic Name	Brand Name
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)
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

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

Generic Name	Brand Name
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	Hydromet
hydrocodone bitartrate/homatropine	
methylbromide	Tussigon
hydrocodone bitartrate/homatropine	
methylbromide	hydrocodone-homatropine
hydrocodone bitartrate/pseudoephedrine	
HCl/guaifenesin	Hycofenix
hydrocodone polistirex/chlorpheniramine polistirex	
hydrocodone polistirex/chlorpheniramine polistirex	TussiCaps
hydrocodone polistirex/chlorpheniramine polistirex	Tussionex Pennkinetic ER
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	Novacort (with aloe)
polysaccharide	
hydrocortisone acetate/pramoxine HCl/emollient	Pramosone E
base	
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

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

Generic Name	Brand Name
hydrocortisone/aloe vera	hydrocortisone-aloe vera
hydrocortisone/aloe vera/vitamin E	Anti-Itch (HC) with Aloe-Vit E
acetate/vitamins A and D	
hydrocortisone/aloe vera/vitamin E	Anti-Itch Plus
acetate/vitamins A and D	
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
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/glycopyrrrolate	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

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

Generic Name	Brand Name
levalbuterol tartrate	levalbuterol tartrate
levocetirizine dihydrochloride	24HR Allergy Relief
levocetirizine dihydrochloride	Xyzal
levocetirizine dihydrochloride	levocetirizine
levocetirizine dihydrochloride	levocetirizine (bulk)
Iodoxamide tromethamine	Alomide
loratadine	Alavert
loratadine	Allerclear
loratadine	Allergy Relief (loratadine)
loratadine	Children's Allergy Relief(Ior)
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, micronized	loratadine (bulk)
loratadine/pseudoephedrine sulfate	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
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

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

Generic Name	Brand Name
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/ammonium lactate	mometasone furoate (bulk)
mometasone furoate/formoterol fumarate	Momexin
montelukast sodium	Dulera
montelukast sodium	Singulair
montelukast sodium	montelukast
naproxen	montelukast (bulk)
naproxen sodium	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	Pyrroxate Cold andCongestion

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

Generic Name	Brand Name
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	
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 HCl/acetaminophen/doxylamine	Sinutrol PE
succinate	
phenylephrine HCl/acetaminophen/doxylamine	DayTime and NiteTime Sinus
succinate	
phenylephrine HCl/acetaminophen/doxylamine	NightTime Sinus
succinate	
phenylephrine HCl/acetaminophen/doxylamine	Nighttime Sinus-Congestion
succinate	
phenylephrine HCl/acetaminophen/doxylamine	Sinus Daytime-Nightime
succinate	
phenylephrine HCl/acetaminophen/doxylamine	Vicks Nyquil Sinex
succinate	
phenylephrine HCl/acetaminophen/doxylamine	Vicks QlearQuil NightimeSinus
succinate	
phenylephrine HCl/chlophedianol HCl/guaifenesin	Donatussin Pediatric
phenylephrine HCl/chlophedianol HCl/guaifenesin	Vanacof GPE

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

Generic Name	Brand Name
phenylephrine HCl/chllophedianol HCl/guaifenesin	phenylephrine-chllophedianol-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	
phenylephrine HCl/dextromethorphan	Fast Mucus Relief SevereCold
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Head Congestion Cold Relief
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Herbiomed Severe Cold-FluM-S
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucinex Cold,Flu,Sore Throat
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucinex Fast-MaxCold-Flu-Thrt
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucinex Fast-Max SevereCold
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucinex Sinus-MaxPressure-Cgh
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucinex Sinus-Max SevCong(DM)
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucus Relief Cold-Flu-SoreThr
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucus Relief Plus
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucus Relief SevCongest-Cold
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Mucus Relief Severe Cold
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Multi-Symptom Cold (PE)
HBr/acetaminophen/guaifen	
phenylephrine HCl/dextromethorphan	Non-Pseudo Cold Relief
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	Pain Relief Cold
HBr/acetaminophen/guaifenesin	Pressure-Pain PE Plus Cold
phenylephrine HCl/dextromethorphan	Pressure-Pain-Cold
HBr/acetaminophen/guaifenesin	Rompe Pecho Max MultiSymptoms
phenylephrine HCl/dextromethorphan	Severe Cold
HBr/acetaminophen/guaifenesin	Severe Cold Multi-Symptom
phenylephrine HCl/dextromethorphan	Severe Cold and Flu (PE)
HBr/acetaminophen/guaifenesin	Sudafed PE Pressure-Pain-Cold
phenylephrine HCl/dextromethorphan	Tussin CF Max Severe M-SCold
HBr/acetaminophen/guaifenesin	Tylenol Cold and Flu Severe
phenylephrine HCl/dextromethorphan	Vicks DayQuil SevereCold-Flu
HBr/acetaminophen/guaifenesin	Wal-Phed PE Cold-Cough
phenylephrine HCl/dextromethorphan	Wal-Phed PE Pressure+Pain+Cold
HBr/acetaminophen/guaifenesin	Aldex-CT
phenylephrine HCl/diphenhydramine HCl	Allergy and Sinus Relief
phenylephrine HCl/diphenhydramine HCl	Child Allergy Plus Congestion
phenylephrine HCl/diphenhydramine HCl	Child Benadryl PlusCongestion
phenylephrine HCl/diphenhydramine HCl	Child's Benadryl-D Allergy-Sin
phenylephrine HCl/diphenhydramine HCl	Children Night TimeCold-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 andCoughNT(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

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

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

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

Generic Name	Brand Name
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
pseudoephedrine HCl/codeine phosphate/guaifenesin	Zodryl DEC 80
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	Ninjacof-A
HCl/acetaminophen	Capron DM
pyrilamine maleate/dextromethorphan HBr	Capron DMT
pyrilamine maleate/dextromethorphan HBr	Pro-Chlo
pyrilamine maleate/phenylephrine	Codituss DM
HCl/chlophedianol HCl	Ninjacof-D
pyrilamine maleate/phenylephrine	Asthmanefrin Refill
HCl/dextromethorphan HBr	Asthmanefrin Starter Kit
pyrilamine maleate/pseudoephedrine	S2 Racepinephrine
HCl/chlophedianol HCl	racepinephrine
racepinephrine HCl	racepinephrine (bulk)
racepinephrine HCl	Cinqair
racepinephrine HCl	Yupelri
racepinephrine HCl	Daliresp
reslizumab	Serevent Diskus
revefenacin	terbutaline
roflumilast	Elixophyllin
salmeterol xinafoate	Theo-24
terbutaline sulfate	
theophylline anhydrous	
theophylline anhydrous	

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

Generic Name	Brand Name
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
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 in 0.9 % sodium chloride	triamcinolone acetonide
triamcinolone acetonide/0.9% sodium chloride/PF	triamcinolone acetonide (bulk)
triamcinolone acetonide/dimethicone	triamcinolone aceton-0.9%NaCl
triamcinolone acetonide/dimethicone/silicone,	Ellzia Pak
adhesive	DermaSilkRx SDS
triamcinolone acetonide/dimethicone/silicone,	DermaWerx SDS
adhesive	
triamcinolone acetonide/dimethicone/silicone,	DermacinRx SilaPak
adhesive	
triamcinolone acetonide/dimethicone/silicone,	NuTriaRx
adhesive	
triamcinolone acetonide/dimethicone/silicone,	SanaDermRx
adhesive	
triamcinolone acetonide/dimethicone/silicone,	Sure Result Tac Pak
adhesive	
triamcinolone acetonide/dimethicone/silicone,	Tri-Sila
adhesive	
triamcinolone acetonide/dimethicone/silicone,	Whytederm TDPak
adhesive	
triamcinolone acetonide/dimethicone/silicone,	Whytederm Trilasil Pak
adhesive	
triamcinolone acetonide/emollient combination	Pediaderm TA
no.45	

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

Generic Name	Brand Name
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 hexaceton(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
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	Histex DM
HCl/dextromethorphan HBr	Aprodine
triprolidine HCl/pseudoephedrine HCl	Trymine CD
triprolidine HCl/pseudoephedrine	Incruse Ellipta
HCl/chlophedianol HCl	Anoro Ellipta
umeclidinium bromide	Accolate
umeclidinium bromide/vilanterol trifenatate	zafirlukast
zafirlukast	Zyflo
zafirlukast	Zyflo CR
zileuton	zileuton
zileuton	
zileuton	

Nonsteroidal Anti-Inflammatory Drugs (NSAID)

CHLORPHENIRAMINE	Advil Allergy-Congestion Rlf
MALEATE/PHENYLEPHRINE HCL/IBUPROFEN	
CHLORPHENIRAMINE	Advil Allergy Sinus
MALEATE/PSEUDOEPHEDRINE	
HCl /IBUPROFEN	

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

Generic Name	Brand Name
HYDROCODONE/IBUPROFEN	Ibudone
HYDROCODONE/IBUPROFEN	Repxain
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
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

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

Generic Name	Brand Name
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
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	Qmiz ODT
meloxicam, submicronized	Vilodex
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)

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

Generic Name	Brand Name
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	Inspira
eplerenone	eplerenone
ethacrynat sodium	Sodium Edecrin
ethacrynat sodium	ethacrynat sodium
ethacrynic acid	Edecrin
ethacrynic acid	ethacrynic acid
furosemide	Lasix
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
methylclothiazide	methylclothiazide
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
torsemide	Demadex
torsemide	torsemide
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) tools v11.2.3 with additional programming to assess the risk for angioedema associated with various sacubitril/valsartan (SV) new user subgroups among heart failure patients in the Sentinel Distributed Database (SDD).

Query Period: 7/7/2015 - DP-specific data completeness end date at time of execution of cder_mpl2r_wp016 and cder_mpl2p_wp021

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, KM curves (zoomed in, at-risk table shown)

Freeze Data: On

Additional Programming Needed: Local reporting for KM curves by subgroup and stratified analyses by user-specified risk window

	Comparison 1		Comparison 2		Comparison 3	
	ACEI-SV	ARB-SV	ACEI-SV	SV	ARB-SV	SV
Drug/Exposure						
Request Package Group	SV_ARB	SV_ACEI	SV_ARB	SV_ACEI_ARB	SV_ACEI	SV_ACEI_ARB
Exposure/Comparator	SV	SV	SV	SV	SV	SV
Incident with Respect to:	SV, ARB	SV, ACEI	SV, ARB	SV, ACEI, ARB	SV, ACEI	SV, ACEI, ARB
Incidence Assessment	Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply	
Washout (days)	183		183		183	
Cohort Definition	First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode	
Stockpiling overlapping claims	Default		Default		Default	
Episode Gap (days)	14		14		14	
Episode Extension Period (days)	14		14		14	
Maximum Episode Duration (days)	365		365		365	
Censor Criteria	ACEI, ARB, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ACEI, ARB, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ACEI, ARB, end of treatment, outcome occurrence, disenrollment, recorded death, data end date	

Appendix H: Specifications Defining Parameters for this Request

	Comparison 1		Comparison 2		Comparison 3	
	ACEI-SV	ARB-SV	ACEI-SV	SV	ARB-SV	SV
Inclusion/Exclusion*						
Pre-Existing Condition	Heart failure		Heart failure		Heart failure	
Include/Exclude	Include		Include		Include	
Lookback Period (days)	-183, 0		-183, 0		-183, 0	
Pre-Existing Condition	ACEI	ARB	ACEI	----	ARB	----
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, ARB		ACEI, ARB		ACEI, ARB	
Include/Exclude	Exclude		Exclude		Exclude	
Care Setting/PDX	Any		Any		Any	
Lookback Period (days)	0		0		0	
Inclusion Assessment	Dispensing date		Dispensing date		Dispensing date	
Event/Outcome						
Event/Outcome	Angioedema		Angioedema		Angioedema	
Care Setting/PDX	Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient	
Washout (days)	0		0		0	
Blackout Period (days)	0		0		0	
Propensity Score Matching						
Covariates	See Appendix I		See Appendix I		See Appendix I	
Matching Ratio	1:1		1:1		1:1	
Matching Caliper Settings	0.05		0.05		0.05	
Analysis Type	Conditional and unconditional		Conditional and unconditional		Conditional and unconditional	
Risk Window Analysis	0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365	
Subgroup Analyses						
Stratifying variable	Angioedema		Angioedema		Angioedema	
Evaluation Window (days)	-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	
Priority output	Yes		Yes		Yes	
Risk Window Analysis (days)	0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365	
Stratifying variable	Angioedema		Angioedema		Angioedema	
Evaluation Window (days)	Pre-index enrollment history, -1		Pre-index enrollment history, -1		Pre-index enrollment history, -1	

Appendix H: Specifications Defining Parameters for this Request

	Comparison 1		Comparison 2		Comparison 3	
	ACEI-SV	ARB-SV	ACEI-SV	SV	ARB-SV	SV
Re-matching						
Priority output	Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No	
Stratifying variable	Serious allergies -183, -1		Serious allergies -183, -1		Serious allergies -183, -1	
Evaluation Window (days)						
Re-matching	Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No	
Priority output						
Stratifying variable	Age group		Age group		Age group	
Re-matching	Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No	
Priority output						
Stratifying variable	Sex		Sex		Sex	
Re-matching	Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No		Re-matching should be done with the pre-matched cohort No	
Priority output						
Stratifying variable	Race		Race		Race	
Re-matching	Re-matching should be done with the pre-matched cohort Yes		Re-matching should be done with the pre-matched cohort Yes		Re-matching should be done with the pre-matched cohort Yes	
Priority output						
Risk Window Analysis (days)	0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365	

International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition (CPT-4) 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

	Comparison 4		Comparison 5		Comparison 6	
	ACEI-SV	ARB-SV	ACEI-SV	SV	ARB-SV	SV
Drug/Exposure						
Request Package Group	SV_ARB_14	SV_ACEI_14	SV_ARB_14	SV_ACEI_ARB	SV_ACEI_14	SV_ACEI_ARB
Exposure/Comparator	SV	SV	SV	SV	SV	SV
Incident with Respect to:	SV, ARB	SV, ACEI	SV, ARB	SV, ACEI, ARB	SV, ACEI	SV, ACEI, ARB
Incidence Assessment	Dispensing date or days supply		Dispensing date or days supply		Dispensing date or days supply	
Washout (days)	183		183		183	
Cohort Definition	First valid incident exposure episode		First valid incident exposure episode		First valid incident exposure episode	
Stockpiling overlapping claims	Default		Default		Default	
Episode Gap (days)	14		14		14	
Episode Extension Period (days)	14		14		14	
Maximum Episode Duration (days)	365		365		365	
Censor Criteria	ACEI, ARB, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ACEI, ARB, end of treatment, outcome occurrence, disenrollment, recorded death, data end date		ACEI, ARB, end of treatment, outcome occurrence, disenrollment, recorded death, data end date	
Inclusion/Exclusion*						
Pre-Existing Condition	Heart failure		Heart failure		Heart failure	
Include/Exclude	Include		Include		Include	
Lookback Period (days)	-183, 0		-183, 0		-183, 0	
Pre-Existing Condition	ACEI	ARB	ACEI	----	ARB	----
Include/Exclude	Include	Include	Include	----	Include	----
Care Setting/PDX	Any	Any	Any	----	Any	----
Lookback Period (days)	-14, 0	-14, 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, ARB		ACEI, ARB		ACEI, ARB	
Include/Exclude	Exclude		Exclude		Exclude	
Care Setting/PDX	Any		Any		Any	
Lookback Period (days)	0		0		0	
Inclusion Assessment	Dispensing date		Dispensing date		Dispensing date	
Event/Outcome						
Event/Outcome	Angioedema		Angioedema		Angioedema	

Appendix H: Specifications Defining Parameters for this Request

	Comparison 4		Comparison 5		Comparison 6	
	ACEI-SV	ARB-SV	ACEI-SV	SV	ARB-SV	SV
Care Setting/PDX	Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient		Inpatient, emergency department or outpatient	
Washout (days)	0		0		0	
Blackout Period (days)	0		0		0	
Propensity Score Matching						
Covariates	See Appendix I		See Appendix I		See Appendix I	
Matching Ratio	1:1		1:1		1:1	
Matching Caliper Settings	0.05		0.05		0.05	
Analysis Type	Conditional and unconditional		Conditional and unconditional		Conditional and unconditional	
Risk Window Analysis	0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365	
Subgroup Analyses						
Stratifying variable	Angioedema		Angioedema		Angioedema	
Evaluation Window (days)	-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	
Priority output	Yes		Yes		Yes	
Risk Window Analysis (days)	0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365	
Stratifying variable	Angioedema		Angioedema		Angioedema	
Evaluation Window (days)	Pre-index enrollment history, -1		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		Re-matching should be done with the pre-matched cohort	
Priority output	No		No		No	
Stratifying variable	Serious allergies		Serious allergies		Serious allergies	
Evaluation Window (days)	-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	
Priority output	No		No		No	
Stratifying variable	Age group		Age group		Age group	
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	
Priority output	No		No		No	

Appendix H: Specifications Defining Parameters for this Request

	Comparison 4		Comparison 5		Comparison 6	
	ACEI-SV	ARB-SV	ACEI-SV	SV	ARB-SV	SV
Stratifying variable	Sex		Sex		Sex	
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	
Priority output	No		No		No	
Stratifying variable	Race		Race		Race	
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	
Priority output	Yes		Yes		Yes	
Risk Window Analysis (days)	0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365		0-30, 31-60, 61-90, 91-180, 181-270, 271-365	
International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology, Fourth Edition (CPT-4) 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 Baseline Characteristics and Propensity Score Analysis Covariates Evaluated in this Request

Baseline Covariate Groups Evaluated in this Request		KEY: Highlighted = Characteristic not included in Propensity-Score Model
Covariate		Covariate Evaluation Window
Age (continuous)		Index date
Age-group		
18-44		Index date
45-54		Index date
55-64		Index date
65+		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
Hispanic Ethnicity		Index date
Year		
2015		Index date
2016		Index date
2017		Index date
2018		Index date
2019		Index date
2020		Index date
Combined comorbidity score		-183 to 0
Angioedema		-183 to -1
Angioedema		Ever to -1
Ambulatory allergies (AV/OA) or allergy treatment		-183 to -1
Serious allergies (ED/IP)		-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
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
Health care utilization		
Number of inpatient hospital stays		-183 to 0
Number of emergency department visits		-183 to 0
Number of institutional stay visits		-183 to 0
Number of ambulatory visits		-183 to 0
Number of other ambulatory visits		-183 to 0
Drug utilization		
Mean number of filled prescriptions		-183 to 0
Mean number of generics		-183 to 0
Mean number of unique drug classes		-183 to 0