Initial Event Cohort

People having any of the following: 

* a drug exposure record of ACE Inhibitor (ATC code of C09A or C09B)

with continuous observation of at least 365 days prior to initial events and is 15 years old or older between 2009 and 2015**.**

For people matching the Primary Events, include:

Having all of the following criteria:

* Having a condition occurrence record of angioneurotic edema (ICD9-CM of 995.1

# Anaphylaxis

## Disease Synopsis

Anaphylaxis is an acute allergic reaction to an antigen (e.g., a bee sting) to which the body has become hypersensitive

## Phenotype Methodology

To identify the risk of angiotensin-converting enzyme (ACE) inhibitor – associated angioedema

Find patients 15 years or older with at least one year of observation period prior to 2009. The patient needs to have being prescribed an ACE inhibitor (ATC C09A or C09B) between 2009 – 2015 and also diagnosis with angioneurotic edema after using the ACE inhibitor.

## External References

<https://www.sentinelinitiative.org/sentinel/surveillance-tools/validations-lit-review/466>

# Atlas JSON

# {

# "ConceptSets": [

# {

# "id": 0,

# "name": "[F2F] Ace Inhibitors",

# "expression": {

# "items": [

# {

# "concept": {

# "CONCEPT\_CLASS\_ID": "ATC 3rd",

# "CONCEPT\_CODE": "C09B",

# "CONCEPT\_ID": 21601801,

# "CONCEPT\_NAME": "ACE INHIBITORS, COMBINATIONS",

# "DOMAIN\_ID": "Drug",

# "INVALID\_REASON": "V",

# "INVALID\_REASON\_CAPTION": "Valid",

# "STANDARD\_CONCEPT": "C",

# "STANDARD\_CONCEPT\_CAPTION": "Classification",

# "VOCABULARY\_ID": "ATC"

# },

# "includeDescendants": true

# },

# {

# "concept": {

# "CONCEPT\_CLASS\_ID": "ATC 3rd",

# "CONCEPT\_CODE": "C09A",

# "CONCEPT\_ID": 21601783,

# "CONCEPT\_NAME": "ACE INHIBITORS, PLAIN",

# "DOMAIN\_ID": "Drug",

# "INVALID\_REASON": "V",

# "INVALID\_REASON\_CAPTION": "Valid",

# "STANDARD\_CONCEPT": "C",

# "STANDARD\_CONCEPT\_CAPTION": "Classification",

# "VOCABULARY\_ID": "ATC"

# },

# "includeDescendants": true

# }

# ]

# }

# },

# {

# "id": 1,

# "name": "[F2F] Angioneurotic edema",

# "expression": {

# "items": [

# {

# "concept": {

# "CONCEPT\_CLASS\_ID": "Clinical Finding",

# "CONCEPT\_CODE": "41291007",

# "CONCEPT\_ID": 432791,

# "CONCEPT\_NAME": "Angioedema",

# "DOMAIN\_ID": "Condition",

# "INVALID\_REASON": "V",

# "INVALID\_REASON\_CAPTION": "Valid",

# "STANDARD\_CONCEPT": "S",

# "STANDARD\_CONCEPT\_CAPTION": "Standard",

# "VOCABULARY\_ID": "SNOMED"

# },

# "includeDescendants": true

# }

# ]

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# }

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# "PrimaryCriteria": {

# "CriteriaList": [

# {

# "DrugExposure": {

# "CodesetId": 0,

# "OccurrenceStartDate": {

# "Value": "2009-01-01",

# "Extent": "2015-12-31",

# "Op": "bt"

# },

# "Age": {

# "Value": 15,

# "Op": "gte"

# }

# }

# }

# ],

# "ObservationWindow": {

# "PriorDays": "365",

# "PostDays": 0

# },

# "PrimaryCriteriaLimit": {

# "Type": "All"

# }

# },

# "AdditionalCriteria": {

# "Type": "ALL",

# "CriteriaList": [

# {

# "Criteria": {

# "ConditionOccurrence": {

# "CodesetId": 1

# }

# },

# "StartWindow": {

# "Start": {

# "Days": "1",

# "Coeff": 1

# },

# "End": {

# "Coeff": 1

# }

# },

# "Occurrence": {

# "Type": 2,

# "Count": 1

# }

# }

# ],

# "DemographicCriteriaList": [],

# "Groups": []

# },

# "QualifiedLimit": {

# "Type": "First"

# },

# "ExpressionLimit": {

# "Type": "First"

# },

# "InclusionRules": [],

# "CensoringCriteria": []

# }

# Custom SQL

select distinct(pat.person\_id) from person pat

join

(

select co1.\* from condition\_occurrence co1

join(select PERSON\_ID, max(observation\_period\_start\_date) observation\_period\_start\_date from observation\_period

where observation\_period\_start\_date >= '2008/12/01' group by PERSON\_ID) op

on op.PERSON\_ID = co1.PERSON\_ID

)co on pat.PERSON\_ID = co.PERSON\_ID

join (

select \* from DRUG\_ERA

where DRUG\_CONCEPT\_ID in

(select ca.DESCENDANT\_CONCEPT\_ID from concept\_ancestor ca where ancestor\_concept\_id in (21601783,21601801))

) dera on pat.PERSON\_ID = dera.person\_id

where co.CONDITION\_Concept\_ID in (432791)

and

co.CONDITION\_START\_DATE >= dera.DRUG\_ERA\_START\_DATE

and dera.DRUG\_ERA\_START\_DATE >= '2009/01/01'

and pat.YEAR\_OF\_BIRTH < 2001