Some Example Questions

Ex 1

New Users of Warfarin

Ex 2

New Users of Warfarin
who are >=65?

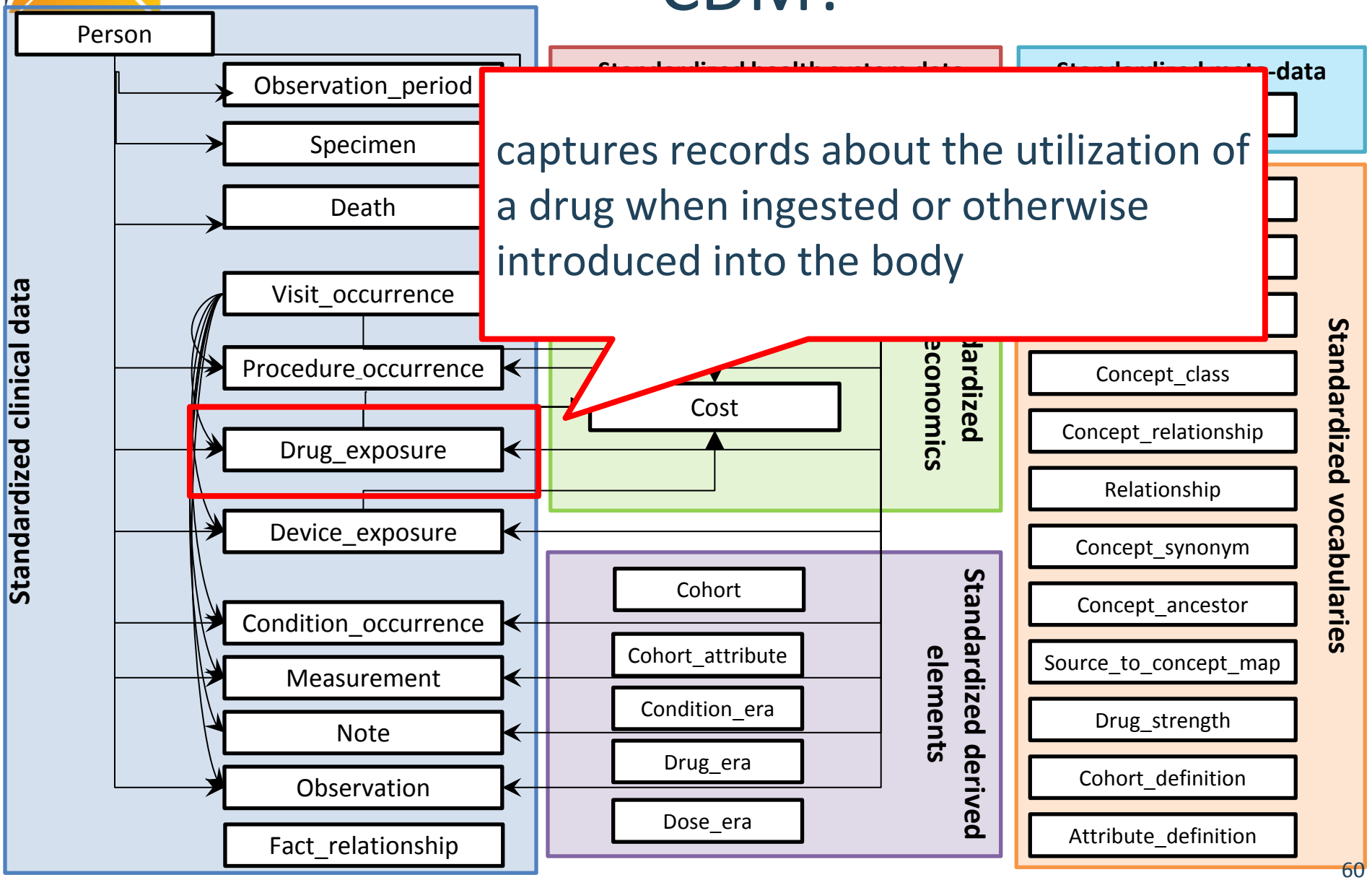
Ex 3

New Users of Warfarin
with prior Atrial Fibrillation?

New Users of Warfarin

- Warfarin is a blood thinner that is used to treat/prevent blood clots.
  - Where do you find drug data in the CDM?
  - What codes do I use to define drugs?
  - What does “New User” mean?

Where are Drug Exposures in the CDM?

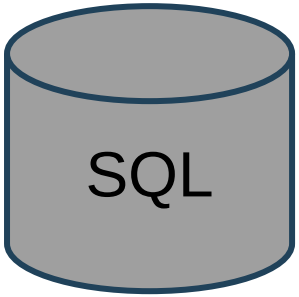


How do I define Warfarin?

- When raw data is transformed into the CDM raw source codes are transformed into standard OMOP Vocabulary concepts
- In the CDM, we no longer care what source concepts existed in the raw data, we just need to use concept identifiers
- We can use the OMOP Vocabulary to identify all concepts that contain the ingredient warfarin

Ex 1

How do I define Warfarin?

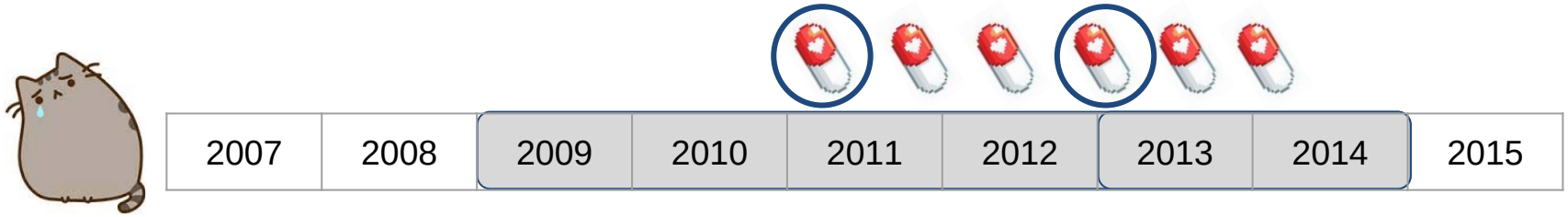


- Writing SQL Statement

- OHDSI Tool ATLAS

Ex 1 How do I define new users of a drug?

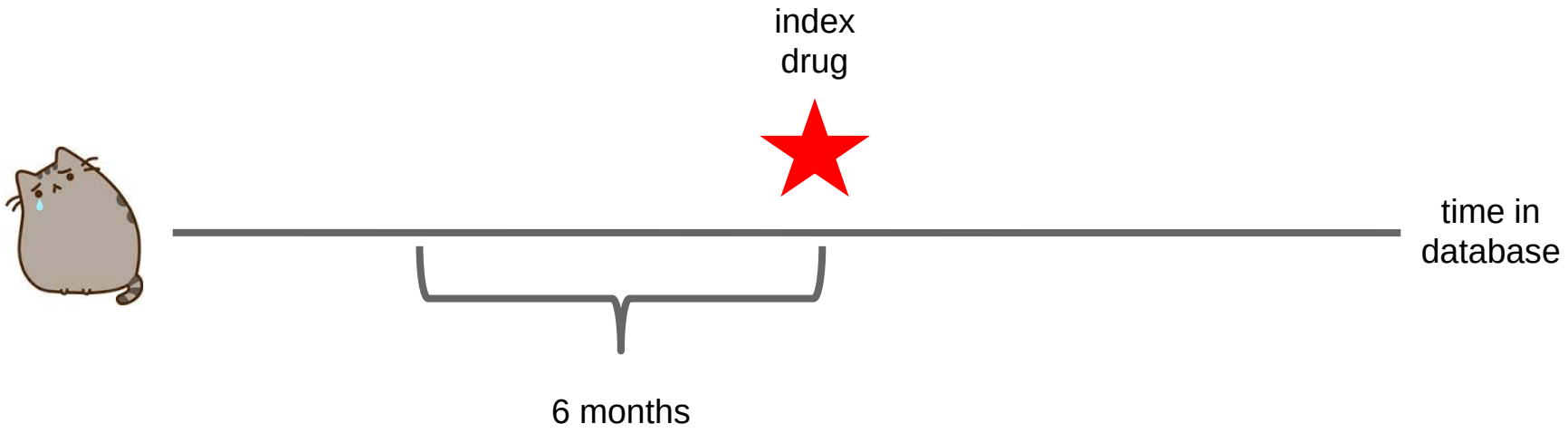
- someone who has recently started taking the drug, typically with a 6 or 12 month wash out



Ex 1

How do I define new users of a drug?

- someone who has recently started taking the drug, typically with a 6 or 12 month wash out



What is Needed in the CDM?

- **OMOP Vocabulary**
  to find the concepts
- **DRUG_EXPOSURE**
  to find individuals with exposure
- **OBSERVATION_PERIOD**
  to know people's time within the database

New Users of Warfarin

```
/**********************************************************************************
*    (Exercise 1) Warfarin New Users
**********************************************************************************/

WITH CTE_DRUG_INDEX AS (
    SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
    FROM DRUG_EXPOSURE de
    WHERE de.DRUG_CONCEPT_ID IN (
        SELECT DESCENDANT_CONCEPT_ID
        FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
    )
    GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
    (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
FROM CTE_DRUG_INDEX i
    JOIN OBSERVATION_PERIOD op
        ON op.PERSON_ID = i.PERSON_ID
        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
ORDER BY i.PERSON_ID
```

Step 1: Get the codes you need

```
/**********************************************************************************
*    (Exercise 1) Warfarin New Users
**********************************************************************************/

WITH CTE_DRUG_INDEX AS (
    SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
    FROM DRUG_EXPOSURE de
    WHERE de.DRUG_CONCEPT_ID IN (
        SELECT DESCENDANT_CONCEPT_ID
        FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
    )
    GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
    (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
FROM CTE_DRUG_INDEX i
    JOIN OBSERVATION_PERIOD op
        ON op.PERSON_ID = i.PERSON_ID
        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
ORDER BY i.PERSON_ID
```

Step 2: Find Drug Exposures

```
/**********************************************************************************
*    (Exercise 1) Warfarin New Users
**********************************************************************************/

WITH CTE_DRUG_INDEX AS (
    SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
    FROM DRUG_EXPOSURE de
    WHERE de.DRUG_CONCEPT_ID IN (
        SELECT DESCENDANT_CONCEPT_ID
        FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
    )
    GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
    (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
FROM CTE_DRUG_INDEX i
    JOIN OBSERVATION_PERIOD op
        ON op.PERSON_ID = i.PERSON_ID
        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
ORDER BY i.PERSON_ID
```

Step 3: Find New Users

```
/**********************************************************************************
*    (Exercise 1) Warfarin New Users
**********************************************************************************/

WITH CTE_DRUG_INDEX AS (
    SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
    FROM DRUG_EXPOSURE de
    WHERE de.DRUG_CONCEPT_ID IN (
        SELECT DESCENDANT_CONCEPT_ID
        FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
    )
    GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
    (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
FROM CTE_DRUG_INDEX i
    JOIN OBSERVATION_PERIOD op
        ON op.PERSON_ID = i.PERSON_ID
        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
ORDER BY i.PERSON_ID
```

Ex 1

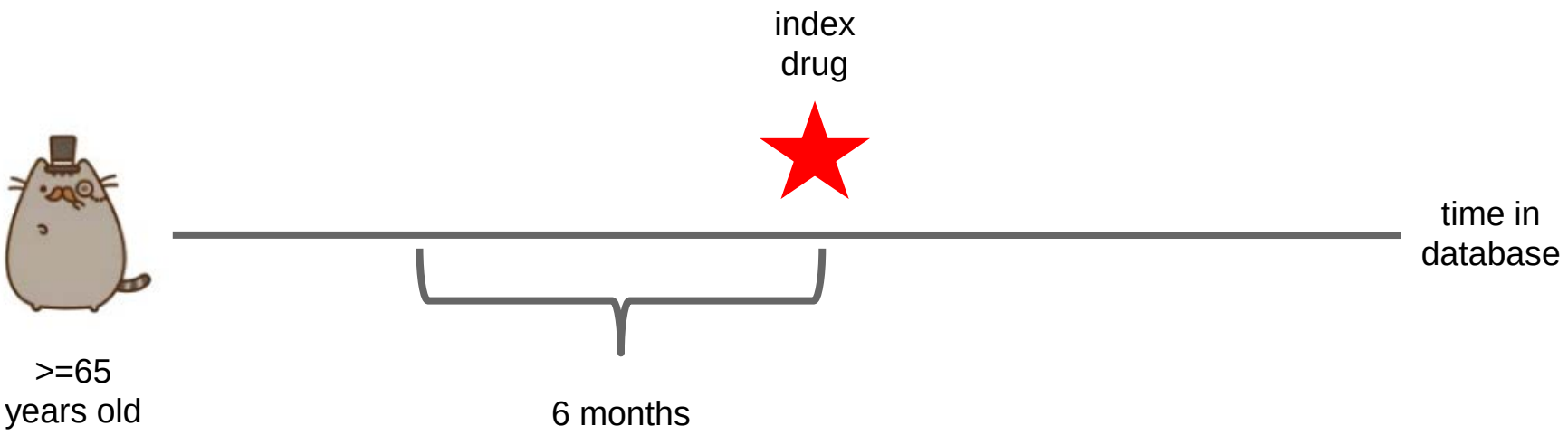
New Users of Warfarin

```
/**********************************************************************************
*    (Exercise 1) Warfarin New Users
**********************************************************************************/

WITH CTE_DRUG_INDEX AS (
    SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
    FROM DRUG_EXPOSURE de
    WHERE de.DRUG_CONCEPT_ID IN (
        SELECT DESCENDANT_CONCEPT_ID
        FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
    )
    GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
    (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
FROM CTE_DRUG_INDEX i
    JOIN OBSERVATION_PERIOD op
        ON op.PERSON_ID = i.PERSON_ID
        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
ORDER BY i.PERSON_ID
```

Ex 2

How do I define new users of warfarin who are >=65?

- someone who has recently started taking the drug, typically with a 6 or 12 month wash out



What is Needed in the CDM?

- **OMOP Vocabulary**
  to find the concepts
- **DRUG_EXPOSURE**
  to find individuals with exposure
- **OBSERVATION_PERIOD**
  to know people's time within the database
- **PERSON**
  to know year of birth

Step 1: Start with the previous query

```
/*********************************************************************************
*       (Exercise 2) Warfarin New Users 65 or Older at Index
*********************************************************************************/

WITH CTE_DRUG_INDEX AS (
        SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
        FROM DRUG_EXPOSURE de
        WHERE de.DRUG_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
        )
        GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
        (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX,
        EXTRACT(YEAR FROM i.INDEX_DATE)-p.YEAR_OF_BIRTH AS AGE_AT_INDEX
FROM CTE_DRUG_INDEX i
        JOIN OBSERVATION_PERIOD op
                ON op.PERSON_ID = i.PERSON_ID
                AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
        JOIN PERSON p
                ON p.PERSON_ID = i.PERSON_ID
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
AND EXTRACT(YEAR FROM i.INDEX_DATE)-p.YEAR_OF_BIRTH >= 65
ORDER BY i.PERSON_ID
```

Step 2: Add the Person Table to calculate age

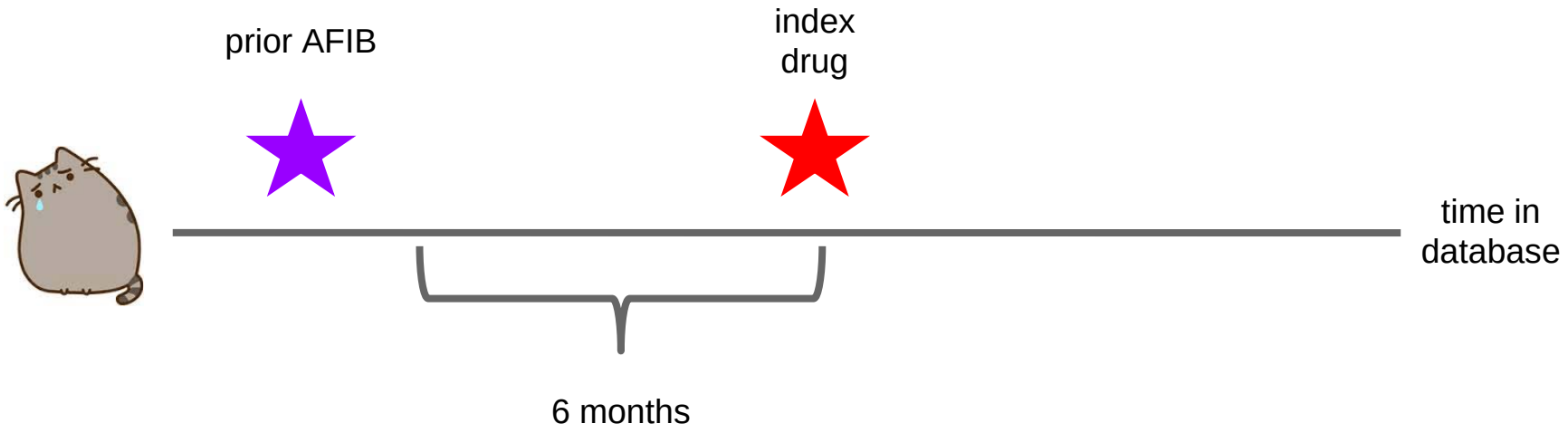
```
/**************************************************************************
*       (Exercise 2) Warfarin New Users 65 or Older at Index
**************************************************************************/

WITH CTE_DRUG_INDEX AS (
        SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
        FROM DRUG_EXPOSURE de
        WHERE de.DRUG_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
        )
        GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
        (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX,
        EXTRACT(YEAR FROM i.INDEX_DATE)-p.YEAR_OF_BIRTH AS AGE_AT_INDEX
FROM CTE_DRUG_INDEX i
        JOIN OBSERVATION_PERIOD op
                ON op.PERSON_ID = i.PERSON_ID
                AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
        JOIN PERSON p
                ON p.PERSON_ID = i.PERSON_ID
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
AND EXTRACT(YEAR FROM i.INDEX_DATE)-p.YEAR_OF_BIRTH >= 65
ORDER BY i.PERSON_ID
```

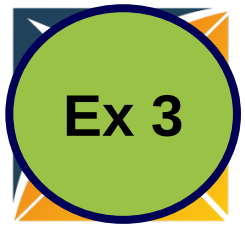
New Users of Warfarin <= 65 years of age

```
/**********************************************************************
*       (Exercise 2) Warfarin New Users 65 or Older at Index
**********************************************************************/

WITH CTE_DRUG_INDEX AS (
        SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
        FROM DRUG_EXPOSURE de
        WHERE de.DRUG_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
        )
        GROUP BY de.PERSON_ID
)
SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
        (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX,
        EXTRACT(YEAR FROM i.INDEX_DATE)-p.YEAR_OF_BIRTH AS AGE_AT_INDEX
FROM CTE_DRUG_INDEX i
        JOIN OBSERVATION_PERIOD op
                ON op.PERSON_ID = i.PERSON_ID
                AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
        JOIN PERSON p
                ON p.PERSON_ID = i.PERSON_ID
WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
AND EXTRACT(YEAR FROM i.INDEX_DATE)-p.YEAR_OF_BIRTH >= 65
ORDER BY i.PERSON_ID
```

Ex 3

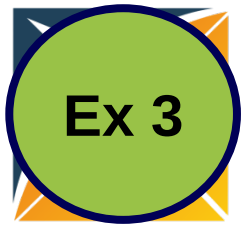
How do I define new users of Warfarin with prior Atrial Fibrillation?





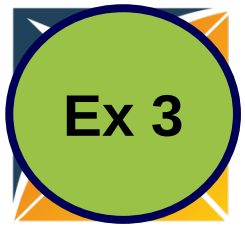
What is Needed in the CDM?

- **OMOP Vocabulary**
  to find the concepts
- **DRUG_EXPOSURE**
  to find individuals with exposure
- **OBSERVATION_PERIOD**
  to know people's time within the database
- **CONDITION_OCCURRENCE**
  to find presence of a disease



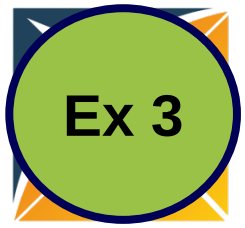
Step 1: Start with the Ex 1 query

```
/**********************************************************************************
*       (Exercise 3) Warfarin New Users With Prior AFIB
**********************************************************************************/

WITH CTE_DRUG_INDEX AS (
        SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
        FROM DRUG_EXPOSURE de
        WHERE de.DRUG_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
        )
        GROUP BY de.PERSON_ID
),
CTE_DRUG_NEW_USERS AS (
        SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
                (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
        FROM CTE_DRUG_INDEX i
                JOIN OBSERVATION_PERIOD op
                        ON op.PERSON_ID = i.PERSON_ID
                        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
        WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
)
SELECT nu.*, MAX(nu.INDEX_DATE-co.CONDITION_START_DATE) AS DAYS_OF_CLOSEST_AFIB_PRIOR_TO_INDEX
FROM CTE_DRUG_NEW_USERS nu
        JOIN CONDITION_OCCURRENCE co
                ON co.PERSON_ID = nu.PERSON_ID
                AND co.CONDITION_START_DATE BETWEEN nu.OBSERVATION_PERIOD_START_DATE AND nu.OBSERVATION_PERIOD_END_DATE
WHERE co.CONDITION_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID =  313217 /*Atrial fibrillation*/
)
AND co.CONDITION_START_DATE < nu.INDEX_DATE
GROUP BY nu.PERSON_ID, nu.INDEX_DATE, nu.OBSERVATION_PERIOD_START_DATE, nu.OBSERVATION_PERIOD_END_DATE, nu.DAYS_BEFORE_INDEX
ORDER BY nu.PERSON_ID
```



Step 2: Define Atrial Fibrillation

```
/*********************************************************************************
*       (Exercise 3) Warfarin New Users With Prior AFIB
*********************************************************************************/

WITH CTE_DRUG_INDEX AS (
        SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
        FROM DRUG_EXPOSURE de
        WHERE de.DRUG_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
        )
        GROUP BY de.PERSON_ID
),
CTE_DRUG_NEW_USERS AS (
        SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
                (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
        FROM CTE_DRUG_INDEX i
                JOIN OBSERVATION_PERIOD op
                        ON op.PERSON_ID = i.PERSON_ID
                        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
        WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
)
SELECT nu.*, MAX(nu.INDEX_DATE-co.CONDITION_START_DATE) AS DAYS_OF_CLOSEST_AFIB_PRIOR_TO_INDEX
FROM CTE_DRUG_NEW_USERS nu
        JOIN CONDITION_OCCURRENCE co
                ON co.PERSON_ID = nu.PERSON_ID
                AND co.CONDITION_START_DATE BETWEEN nu.OBSERVATION_PERIOD_START_DATE AND nu.OBSERVATION_PERIOD_END_DATE
WHERE co.CONDITION_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID =  313217 /*Atrial fibrillation*/
)
AND co.CONDITION_START_DATE < nu.INDEX_DATE
GROUP BY nu.PERSON_ID, nu.INDEX_DATE, nu.OBSERVATION_PERIOD_START_DATE, nu.OBSERVATION_PERIOD_END_DATE, nu.DAYS_BEFORE_INDEX
ORDER BY nu.PERSON_ID
```



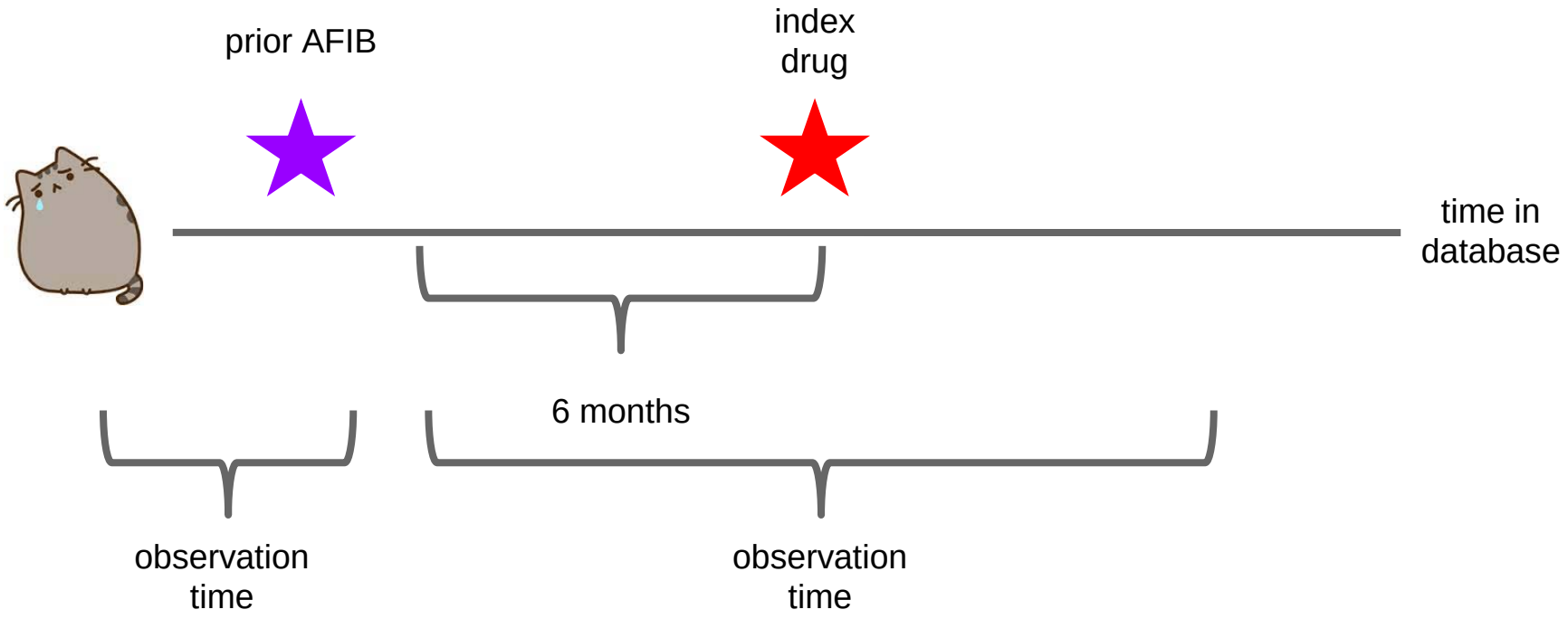
Step 3: Prior Atrial Fibrillation

```
/********************************************************************************
*       (Exercise 3) Warfarin New Users With Prior AFIB
********************************************************************************/

WITH CTE_DRUG_INDEX AS (
        SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
        FROM DRUG_EXPOSURE de
        WHERE de.DRUG_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
        )
        GROUP BY de.PERSON_ID
),
CTE_DRUG_NEW_USERS AS (
        SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
                (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
        FROM CTE_DRUG_INDEX i
                JOIN OBSERVATION_PERIOD op
                        ON op.PERSON_ID = i.PERSON_ID
                        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND
        WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
)
SELECT nu.*, MAX(nu.INDEX_DATE-co.CONDITION_START_DATE) AS DAYS_OF_CLOSEST_AFIB_PRIOR_
FROM CTE_DRUG_NEW_USERS nu
        JOIN CONDITION_OCCURRENCE co
                ON co.PERSON_ID = nu.PERSON_ID
                AND co.CONDITION_START_DATE BETWEEN nu.OBSERVATION_PERIOD_START_DATE AND nu.OBSERVATION_PERIOD_END_DATE
WHERE co.CONDITION_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID =  313217 /*Atrial fibrillation*/
)
AND co.CONDITION_START_DATE < nu.INDEX_DATE
GROUP BY nu.PERSON_ID, nu.INDEX_DATE, nu.OBSERVATION_PERIOD_START_DATE, nu.OBSERVATION_PERIOD_END_DATE, nu.DAYS_BEFORE_INDEX
ORDER BY nu.PERSON_ID
```

Keeps condition within the same observable time, exclude if you want all time prior

Ex 3

How do I define new users of Warfarin with prior Atrial Fibrillation?



Ex 3

New Users of Warfarin with prior Atrial Fibrillation

```
/**************************************************************************
*       (Exercise 3) Warfarin New Users With Prior AFIB
**************************************************************************/

WITH CTE_DRUG_INDEX AS (
        SELECT de.PERSON_ID, MIN(de.DRUG_EXPOSURE_START_DATE) AS INDEX_DATE
        FROM DRUG_EXPOSURE de
        WHERE de.DRUG_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID = 1310149 /*warfarin*/
        )
        GROUP BY de.PERSON_ID
),
CTE_DRUG_NEW_USERS AS (
        SELECT i.PERSON_ID, i.INDEX_DATE, op.OBSERVATION_PERIOD_START_DATE, op.OBSERVATION_PERIOD_END_DATE,
                (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) AS DAYS_BEFORE_INDEX
        FROM CTE_DRUG_INDEX i
                JOIN OBSERVATION_PERIOD op
                        ON op.PERSON_ID = i.PERSON_ID
                        AND i.INDEX_DATE BETWEEN op.OBSERVATION_PERIOD_START_DATE AND op.OBSERVATION_PERIOD_END_DATE
        WHERE (i.INDEX_DATE-op.OBSERVATION_PERIOD_START_DATE) >= 180
)
SELECT nu.*, MAX(nu.INDEX_DATE-co.CONDITION_START_DATE) AS DAYS_OF_CLOSEST_AFIB_PRIOR_TO_INDEX
FROM CTE_DRUG_NEW_USERS nu
        JOIN CONDITION_OCCURRENCE co
                ON co.PERSON_ID = nu.PERSON_ID
                AND co.CONDITION_START_DATE BETWEEN nu.OBSERVATION_PERIOD_START_DATE AND nu.OBSERVATION_PERIOD_END_DATE
WHERE co.CONDITION_CONCEPT_ID IN (
                SELECT DESCENDANT_CONCEPT_ID FROM CONCEPT_ANCESTOR WHERE ANCESTOR_CONCEPT_ID =  313217 /*Atrial fibrillation*/
)
AND co.CONDITION_START_DATE < nu.INDEX_DATE
GROUP BY nu.PERSON_ID, nu.INDEX_DATE, nu.OBSERVATION_PERIOD_START_DATE, nu.OBSERVATION_PERIOD_END_DATE, nu.DAYS_BEFORE_INDEX
ORDER BY nu.PERSON_ID
```

Try on your own!

- Warfarin New Users 65 or Older at Index with Prior Atrial Fibrillation

  8,207 individuals

- Bonus: Clipidogrel New Users 65 or Older at Index with Prior Atrial Fibrillation

  3,148 individuals

Queries Can Be Automated

- Open up Google Chrome 

- Navigate to: http://localhost:8080/atlas/#/home

- In Atlas navigate to Cohorts 

- There should be a pre-existing cohort called "Warfarin New Users 65 or Older at Index with Prior Atrial Fibrillation."

Queries Can Be Automated

Definition | Concept Sets | Generation | Reporting | Explore | Export

Print Friendly | JSON | SQL

Initial Event Cohort

People having any of the following:

- a drug exposure of Warfarin[2]
  - for the first time in the person's history
  - with age >= 65

with continuous observation of at least 180 days prior and 0 days after event index date, and limit initial events to: **earliest event per person.**

For people matching the Primary Events, include:
People having all of the following criteria:

- at least 1 occurrences of a condition occurrence of Atrial fibrillation[1]
  occurring between all days Before and 1 days Before event index date

Limit cohort of initial events to: **earliest event per person.**
Limit qualifying cohort to: **earliest event per person.**
No end date strategy selected. By default, the cohort end date will be the end of the observation period that contains the index event.

Appendi

Definition | Concept Sets | Generation | Reporting | Explore | Export

1. Atrial

Co

Available CDM Sources

	Source Name	Generation Status	Distinct People
▶ Generate	OHDSI CDM V5 Database	COMPLETE	8207

313

2. Warfa

Co

1310149	Warfarin		Drug	RxNorm	NO	YES	NO