**D16:** Find drugs for an indication by indication type

This query provides all drugs that are indicated for a certain condition. In addition, it provides the type of indication: FDA-approved, off-label (both based on FDB indication classes) and may treat and may prevent (both based on NDF-RT). Indications have to be provided as FDB indications (vocabulary\_id=19) or NDF-RT (vocabulary\_id=7).

**Sample query:**

SELECT DISTINCT

drug.concept\_id as drug\_concept\_id,

drug.concept\_name as drug\_concept\_name,

drug.concept\_code as drug\_concept\_code,

rn.relationship\_name as indication\_type,

indication\_relation.relationship\_id

FROM

concept\_relationship indication\_relation

INNER JOIN concept\_ancestor a

ON a.ancestor\_concept\_id=indication\_relation.concept\_id\_2

INNER JOIN concept drug

ON drug.concept\_id=a.descendant\_concept\_id

INNER JOIN relationship rn

ON rn.relationship\_id=indication\_relation.relationship\_id

WHERE indication\_relation.concept\_id\_1 = 4345991

AND drug.vocabulary\_id = 'RxNorm'

AND drug.standard\_concept = 'S'

AND indication\_relation.relationship\_id in (

'May treat',

'Is off-label ind of',

'Is FDA-appr ind of',

'Inferred class of',

'May be prevented by',

'May prevent',

'Has FDA-appr ind',

'Has off-label ind',

'May be treated by',

'Has inferred class')

AND sysdate BETWEEN drug.valid\_start\_date AND drug.valid\_end\_date;

**Input:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Example** | **Mandatory** | **Notes** |
| Indication Concept ID | 4345991 | Yes | FDB indication concept for 'Vomiting' |
| As of date | Sysdate | No | Valid record as of specific date. Current date – sysdate is a default |

**Output:**

|  |  |
| --- | --- |
| **Field** | **Description** |
| Drug\_Concept\_ID | Concept ID of the drug |
| Drug\_Concept\_Name | Name of the drug |
| Drug\_Concept\_Code | Concept code of the drug |
| Indication\_Type | One of the FDB, NDF-RT or OMOP inferred indication types |
| Relationship\_id | Corresponding relationship ID to the Indication Type |

**Sample output record:**

|  |  |
| --- | --- |
| **Field** | **Value** |
| Drug\_Concept\_ID | 19019530 |
| Drug\_Concept\_Name | Perphenazine 4 MG Oral Tablet |
| Drug\_Concept\_Code | 198077 |
| Indication\_Type | Inferred ingredient of (OMOP) |
| Relationship\_id | 281 |