**D08:** Find drug classes for a drug or ingredient

This query is designed to return the therapeutic classes that associated with a drug. The query accepts a standard drug concept ID (e.g. as identified from query [G03](http://vocabqueries.omop.org/general-queries/g3)) as the input. The drug concept can be a clinical or branded drug or pack (concept\_level=1), or an ingredient (concept\_level=2). The query returns one or more therapeutic classes associated with the drug based on the following classifications.).

* Enhanced Therapeutic Classification (ETC)
* Anatomical Therapeutic Chemical classification (ATC)
* NDF-RT Mechanism of Action (MoA)
* NDF-RT Physiologic effect
* NDF-RT Chemical structure
* VA Class

By default, the query returns therapeutic classes based on all the classification systems listed above. Additional clauses can be added to restrict the query to a single classification system.

**Sample query:**

SELECT

c1.concept\_id Class\_Concept\_Id,

c1.concept\_name Class\_Name,

c1.concept\_code Class\_Code,

c1.concept\_class\_id Classification,

c1.vocabulary\_id Class\_vocabulary\_id,

v1.vocabulary\_name Class\_vocabulary\_name,

ca.min\_levels\_of\_separation Levels\_of\_Separation

FROM concept\_ancestor ca,

concept c1,

vocabulary v1

WHERE

ca.ancestor\_concept\_id = c1.concept\_id

AND c1.vocabulary\_id IN ('NDFRT', 'ETC', 'ATC', 'VA Class')

AND c1.concept\_class\_id IN ('ATC','VA Class','Mechanism of Action','Chemical Structure','ETC','Physiologic Effect')

AND c1.vocabulary\_id = v1.vocabulary\_id

AND ca.descendant\_concept\_id = 1545999

AND sysdate BETWEEN c1.valid\_start\_date AND c1.valid\_end\_date;

**Input:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Example** | **Mandatory** | **Notes** |
| Drug Concept ID | 1545999 | Yes | Concept Identifier from RxNorm for ‘atorvastatin 20 MG Oral Tablet [Lipitor]’ |
| As of date | Sysdate | No | Valid record as of specific date. Current date – sysdate is a default |

**Output:**

|  |  |
| --- | --- |
| **Field** | **Description** |
| Class\_Concept\_ID | Concept ID of the therapeutic class |
| Class\_Name | Name of the therapeutic class |
| Class\_Code | Concept Code of therapeutic class |
| Classification | Concept class of therapeutic class |
| Class\_Vocabulary\_ID | Vocabulary the therapeutic class is derived from, expressed as vocabulary ID |
| Class\_Vocabulary\_Name | Name of the vocabulary the therapeutic class is derived from |
| Levels\_of\_Separation | Levels of separation between the drug concept and the therapeutic class. Important for hierarchic classification systems to identify classes and subclasses for the drug. |

**Sample output record:**

|  |  |
| --- | --- |
| **Field** | **Value** |
| Class\_Concept\_ID | 21500263 |
| Class\_Name | Antihyperlipidemics |
| Class\_Code | 263 |
| Classification | Enhanced Therapeutic Classification |
| Class\_Vocabulary\_ID | 20 |
| Class\_Vocabulary\_Name | ETC |
| Levels\_of\_Separation | 2 |