**D09:** Find drugs by drug class

This query is designed to extract all drugs that belong to a therapeutic class. The query accepts a therapeutic class concept ID as the input and returns all drugs that are included under that class .  
Therapeutic classes could be obtained using query [D02](http://vocabqueries.omop.org/drug-queries/d2) and are derived from one of the following:

* Enhanced Therapeutic Classification (FDB ETC), VOCABULARY\_ID = 20
* Anatomical Therapeutic Chemical classification (WHO ATC), VOCABULARY\_ID = 21

– NDF-RT Mechanism of Action (MoA), Vocabulary ID = 7, Concept Class = ‘Mechanism of Action’

– NDF-RT Physiologic effect (PE),        Vocabulary ID = 7, Concept Class = ‘Physiologic Effect’

– NDF-RT Chemical Structure,              Vocabulary ID = 7, Concept Class = ‘Chemical Structure’

* VA Class, Vocabulary ID = 32

**Sample query:**

SELECT c.concept\_id drug\_concept\_id,

c.concept\_name drug\_concept\_name,

c.concept\_class\_id drug\_concept\_class,

c.concept\_code drug\_concept\_code

FROM concept c,

concept\_ancestor ca

WHERE ca.ancestor\_concept\_id = 21506108

AND c.concept\_id = ca.descendant\_concept\_id

AND c.vocabulary\_id = 'RxNorm'

AND c.domain\_id = 'Drug'

AND c.standard\_concept = 'S'

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

**Input:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Example** | **Mandatory** | **Notes** |
| Therapeutic Class Concept ID | 21506108 | Yes | Concept ID for ‘ACE Inhibitors and ACE Inhibitor Combinations’ |
| 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 drug included in therapeutic class |
| Drug\_Concept\_Name | Name of drug concept included in therapeutic class |
| Drug\_Concept\_Class | Concept class of drug concept included in therapeutic class |
| Drug\_Concept\_Code | RxNorm source code of drug concept |

**Sample output record:**

|  |  |
| --- | --- |
| **Field** | **Value** |
| Drug\_Concept\_ID | 1308221 |
| Drug\_Concept\_Name | Lisinopril 40 MG Oral Tablet |
| Drug\_Concept\_Class | Clinical Drug |
| Drug\_Concept\_Code | 197884 |