DEX03: Distribution of age, stratified by drug

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| This query is used to provide summary statistics for the age across all drug exposure records stratified by drug (drug\_concept\_id): the mean, the standard deviation, the minimum, the 25th percentile, the median, the 75th percentile, the maximum and the number of missing values. The age value is defined by the earliest exposure. The input to the query is a value (or a comma-separated list of values) of a drug\_concept\_id. See [vocabulary queries](http://vocabqueries.omop.org/drug-queries) for obtaining valid drug\_concept\_id values. If the input is omitted, age is summarized for all existing drug\_concept\_id values.  **Input:**   |  |  |  |  | | --- | --- | --- | --- | | **Parameter** | **Example** | **Mandatory** | **Notes** | | drug\_concept\_id | 40165254, 40165258 | Yes | Crestor 20 and 40 mg tablets |   **Sample query run:** The following is a sample run of the query. The input parameters are highlighted in **blue**.  SELECT  concept\_name AS drug\_name ,  drug\_concept\_id ,  COUNT(\*) AS patient\_count ,  MIN ( age ) AS min ,  APPROXIMATE PERCENTILE\_DISC(0.25) WITHIN GROUP( ORDER BY age ) AS percentile\_25 ,  ROUND ( AVG ( age ), 2 ) AS mean,  APPROXIMATE PERCENTILE\_DISC(0.5) WITHIN GROUP (ORDER BY age ) AS median ,  APPROXIMATE PERCENTILE\_DISC(0.75) WITHIN GROUP (ORDER BY age ) AS percentile\_75 ,  MAX ( age ) AS max ,  ROUND ( STDDEV ( age ), 1 ) AS stdDev  FROM /\*person, first drug exposure date\*/ (  SELECT  drug\_concept\_id , person\_id ,  MIN( extract(year from drug\_exposure\_start\_date )) - year\_of\_birth as age  FROM  drug\_exposure JOIN full\_201706\_omop\_v5.person USING( person\_id )  WHERE drug\_concept\_id IN /\*crestor 20 and 40 mg tablets \*/ ( **40165254**, **40165258** )  GROUP BY drug\_concept\_id, person\_id , year\_of\_birth  )  JOIN concept ON concept\_id = drug\_concept\_id  WHERE domain\_id='Drug' and standard\_concept='S'  GROUP BY concept\_name, drug\_concept\_id;  **Output:** Output field list:   |  |  | | --- | --- | | **Field** | **Description** | | drug\_name | An unambiguous, meaningful and descriptive name for the concept. | | drug\_concept\_id | A foreign key that refers to a standard concept identifier in the vocabulary for the drug concept. | | patient\_count | The count of patients taking the drug | | min | The age of the youngest patient taking the drug | | percentile\_25 | The 25th age percentile | | mean | The mean or average age of the patients taking the drug | | median | The median age of the patients taking the drug | | percentile\_75 | The 75th age percentile | | max | The age of the oldest patient taking the drug | | stddev | The standard deviation of the age distribution |   Sample output record:   |  |  | | --- | --- | | **Field** | **Content** | | drug\_name | Rosuvastatin calcium 20 MG Oral Tablet [Crestor] | | drug\_concept\_id | 40165254 | | patient\_count | 30321 | | min | 11 | | percentile\_25 | 49 | | mean | 53.87 | | median | 55 | | percentile\_75 | 60 | | max | 93 | | stddev | 8.8 | |