**DER18:** Distribution of age, stratified by drug

This query is used to provide summary statistics for the age across all drug era 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. If the input is omitted, age is summarized for all existing drug\_concept\_id values.

**Sample query:**

SELECT DISTINCT tt.drug\_concept\_id,

min(tt.stat\_value) over () AS min\_value,

max(tt.stat\_value) over () AS max\_value,

avg(tt.stat\_value) over () AS avg\_value,

PERCENTILE\_DISC(0.25) WITHIN GROUP( ORDER BY tt.stat\_value ) over() AS percentile\_25,

PERCENTILE\_DISC(0.5) WITHIN GROUP( ORDER BY tt.stat\_value ) over() AS median\_value,

PERCENTILE\_DISC(0.75) WITHIN GROUP( ORDER BY tt.stat\_value ) over() AS percential\_75

FROM

(

SELECT

extract(year from (min(t.drug\_era\_start\_date) over(partition by t.person\_id, t.drug\_concept\_id) )) - p.year\_of\_birth as stat\_value,

t.drug\_concept\_id

FROM drug\_era t, person p

WHERE t.person\_id = p.person\_id

and t.drug\_concept\_id in (1300978, 1304643, 1549080)

) tt

**Input:**

|  |
| --- |
|  |
| **Parameter** | **Example** | **Mandatory** | **Notes** |
| list of concept\_id | 1300978, 1304643, 1549080 | Yes |  |

**Output:**

|  |  |
| --- | --- |
| **Field** | **Description** |
| Drug\_concept\_id | Unique identifier for drug |
| Min\_value | Minimum number of drug era records for drug |
| Max\_value | Maximum number of drug era records for drug |
| Avg\_value | Average number of drug era records for drug |
| percentile\_25\_date | 25th percentile number of drug era records for drug |
| median\_date | Median number of drug era records for drug |
| percentile\_75\_date | the 75th percentile number of drug era records for drug |

**Sample output record:**

|  |  |
| --- | --- |
| **Field** | **Description** |
| Drug\_concept\_id | 1304643 |
| Min\_value | 0 |
| Max\_value | 108 |
| Avg\_value | 69 |
| percentile\_25\_date | 59 |
| median\_date | 70 |
| percentile\_75\_date | 80 |