



inner join with  
insulin products  
code  
(by=prodcodeid)

inner join with  
non-insulin  
products code  
(by=prodcodeid)

inner join with  
diabetes  
medical code  
(by=medcodeid)

insulin  
patients id

non-insulin  
patients id

diabetes  
patients id

union all  
patients id,  
get unique ids

all diabetes  
patient id

**Patient**

\*Filter patienttypeid==3  
(normal) & acceptable ==1

anti join patient  
table with diabetes  
patient id  
(by=patid)

all non-  
diabetes  
patient id

inner join  
(by=patid)

hba1c test result  
with patient id,  
observation date

left join  
(by=patid)

patient id with  
5/16 ethnicity  
category

inner join with hba1c  
medical code  
(by=medcodeid)  
\*Remove obs with missing/0  
hba1c value and  
obsdate<=1990  
\*Retain last record before  
01Feb2020 or first record  
after 01Feb2020 if no  
previous record

01Feb2020 inner  
join with ethnicity  
medical code  
(by=medcodeid)  
\*Retain unique  
record based on  
rules in CPRD  
Aurum Ethnicity  
Record  
Documentation

**all\_nodia\_cohort**