Team C : effect of MAP of onset of AKI

Notes and SQL code on data extraction

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# COHORT of septic patients

Definition follows <http://jama.jamanetwork.com/article.aspx?articleid=2492881>

I have provided a csv file with all ICUSTAY\_IDs of patients that develop sepsis at some point during their ICU stay. We can also use Alistair’s code but it’s not available on github and he’s away at the moment.

# Comorbidities and premorbid status

https://github.com/MIT-LCP/mimic-code/tree/master/comorbidity/postgres

# Demographics

You’ll have to look at the tables «admission » and « patients » for data such as gender, DOB, DOD, admission and discharge dates etc.

# Extract from chartevents (vital signs and some lab tests)

select distinct icustay\_id, extract(epoch from charttime) as charttime, itemid, valuenum

from mimiciii.chartevents

where icustay\_id in (XXXXXX) and valuenum is not null and itemid in (XXXXXX)

order by icustay\_id, charttime, itemid

# Extract from labevents (more lab tests)

**PROBLEM : labevent does not provide ICUSTAY\_ID, and many patients only have a subjectID and no HAMD\_ID (because they are outpatients). What the query does is select the labevents within the intime - outtime window of each ICUstay\_ID (admission and discharge), to match labevents with ICUSTAY\_IDs.**

select xx.icustay\_id, extract(epoch from f.charttime) as timestp, f.itemid, f.valuenum

from(

select subject\_id, hadm\_id, icustay\_id, intime, outtime

from mimiciii.icustays

group by subject\_id, hadm\_id, icustay\_id, intime, outtime

) as xx inner join mimiciii.labevents as f on f.hadm\_id=xx.hadm\_id and f.charttime>=xx.intime-interval '1 day' and f.charttime<=xx.outtime+interval '1 day' and f.itemid in (XXXXXXX) and valuenum is not null

order by f.hadm\_id, timestp, f.itemid

# Extract urine output

select icustay\_id, extract(epoch from charttime) as charttime, itemid, value

from mimiciii.outputevents

where icustay\_id in (XXXXXXX) and value is not null and itemid in (40055 ,43175 ,40069, 40094 ,40715 ,40473 ,40085, 40057, 40056 ,40405 ,40428, 40096, 40651,226559 ,226560 ,227510 ,226561 ,227489 ,226584, 226563 ,226564 ,226565 ,226557 ,226558)

order by icustay\_id, charttime, itemid

# Extract vasopressors

The vasopressors of interest are :

* Norepinephrine=Noradrenaline=Levophed
* Vasopressin
* Epinephrine=Adrenaline
* Dopamine
* Phenylephrine=Neosynephrine

The data is in 2 different tables :

## From CV

select icustay\_id, itemid, extract(epoch from charttime), rate,case when rateuom='mcgkgmin' then 1 when rateuom='mcgmin' then 2 end as uom

from mimiciii.inputevents\_cv

where itemid in (XXXXXX) and rate is not null

order by icustay\_id, itemid, charttime

## From MV

select icustay\_id, itemid, extract(epoch from starttime) as starttime, extract(epoch from endtime) as endtime, rate,case when rateuom='mcg/kg/min' then 1 when rateuom='units/hour' then 2 end as uom

from mimiciii.inputevents\_mv

where itemid in (XXXXXX) and rate is not null and statusdescription <> 'Rewritten'

order by icustay\_id, itemid, starttime

# Identify dialysis

Tom has provided this link : <https://github.com/MIT-LCP/mimic-code/blob/master/etc/rrt.sql>

Alternatively, you could find the ICD codes of interest. We probably don’t need a precise time flag.