

**Table: Comparison of Variables – Liu et al. (2022) vs. Assignment 3**

<b>Variable</b>	<b>Liu et al. (2022) Methodology</b>	<b>My Methodology (MIMIC-IV in BigQuery)</b>
Age	From structured EHR data	From `mimiciv_derived.age`
Sex	From admission demographic data	From `icustay_detail.gender`
BMI	From height and weight on admission	Calculated using `first_day_height` and `first_day_weight`
Charlson Comorbidity Index	Derived from ICD-9/10 diagnostic codes	Taken from `charlson` derived table
Heart Rate (max)	Worst in 24h pre-extubation	MAX from `vitalsign.heart_rate`
Respiratory Rate (max)	Worst in 24h pre-extubation	MAX from `vitalsign.resp_rate`
MAP (min)	Worst in 24h pre-extubation	MIN from `vitalsign.mbp`
SpO <sub>2</sub> (min)	Worst in 24h pre-extubation	MIN from `vitalsign.spo2`
Temperature (max)	Worst in 24h pre-extubation	MAX from `vitalsign.temperature`
Creatinine (max)	Worst chemistry value in 24h	MAX from `chemistry.creatinine`
Anion Gap (max)	Worst chemistry value in 24h	MAX from `chemistry.aniongap`
WBC (max)	From CBC	MAX from `complete_blood_count.wbc`
Hemoglobin (min)	From CBC	MIN from `complete_blood_count.hemoglobin`
Platelets (min)	From CBC	MIN from `complete_blood_count.platelet`
pH (min)	From arterial blood gas	MIN from `bg.ph` where specimen = 'ART.'
PaO <sub>2</sub> (min)	From arterial blood gas	MIN from `bg.po2`
PaCO <sub>2</sub> (max)	From arterial blood gas	MAX from `bg.pco2`
Base Excess (min)	From arterial blood gas	MIN from `bg.baseexcess`
Oxygenation Index (min)	PaO <sub>2</sub> /FiO <sub>2</sub> ratio	MIN from `bg.pao2fio2ratio`

Tidal Volume (min)	From ventilator settings	MIN from `ventilator_setting.tidal_volume_observed`
FiO <sub>2</sub> (max)	From ventilator settings	MAX from `ventilator_setting.fio2`
PEEP (max)	From ventilator settings	MAX from `ventilator_setting.peep`
GCS (min)	Worst score pre-extubation	MIN from `gcs.gcs`
Urine Output (sum)	Total volume in last 24h	SUM from `urine_output.urineoutput`
IMV Duration (days)	From intubation to extubation	`DATETIME_DIFF(endtime, starttime)` in `ventilation`
Vasopressor Use	If any vasopressor administered in 24h	Flag from `vasoactive_agent` (binary)
Antibiotic Days	Days with active antibiotics	`SUM(DATEDIFF)` from `antibiotic` table
CRRT Days	Total CRRT duration	Count of unique days in `crrt` table