## \*\*Patient Information\*\*

Patient Unit Stay ID: 634297 Unique Patient ID: 006-107303 Gender: Male Age: 36 Ethnicity: Other/Unknown Hospital Admission Time: 2014-XX-XX 12:12:00 Hospital Discharge Time: 2014-XX-XX 19:00:00 Hospital Discharge Status: Alive Hospital Discharge Location: Home Unit Type: Med-Surg ICU Unit Admission Time: 03:03:00 Unit Admission Source: Floor Unit Discharge Time: 19:48:00 Unit Discharge Status: Alive Unit Discharge Location: Other ICU Admission Weight: 90 kg Discharge Weight: 91.5 kg

\*\*History\*\*

Insufficient information provided to generate a detailed patient history. The available data only contains IDs and timestamps, lacking narrative clinical history details such as presenting complaints, past medical history, family history, social history, and medication history.

\*\*Diagnoses\*\*

NULL. No diagnostic information is present in the provided data.

\*\*Treatments\*\*

NULL. No treatment information is present in the provided data.

\*\*Vital Trends\*\*

Heart Rate (HR): The physical exam indicates a current, lowest, and highest heart rate of 131 bpm at 20 minutes post-unit admission. Further data is needed to show trends over time. Respiratory Rate (RR): The physical exam shows a current, lowest and highest respiratory rate of 27 breaths per minute at 20 minutes post-unit admission. Additional data is required to illustrate trends.

\*\*Lab Trends\*\*

The provided lab data shows multiple chemistry tests performed at various times relative to unit admission. There are both admission and in-stay lab values. The following trends are notable:

\*\*\*Sodium (Na+):\*\* Levels fluctuated between 134 mmol/L (admission) and 140 mmol/L (in-stay), suggesting potential electrolyte imbalance requiring monitoring. \* \*\*Potassium (K+):\*\* Observed values ranged from 3.2 mmol/L (admission) to 3.8 mmol/L (in-stay), indicating potential need for monitoring. \* \*\*Bicarbonate (HCO3-):\*\* Levels varied from 21 mmol/L (in-stay) to 25 mmol/L (admission), possibly reflecting metabolic changes that need further investigation. \* \*\*Chloride (Cl-):\*\* Showed variation between 99 mmol/L (admission) and 104 mmol/L (in-stay). More data is needed to determine if this is significant. \* \*\*BUN and Creatinine:\*\* BUN levels varied from 5mg/dL (admission) to 10 mg/dL (in-stay), while creatinine varied from 0.6 mg/dL (admission) to 0.7 mg/dL (in-stay). Further monitoring may be needed to assess renal function. \* \*\*Liver Enzymes (AST, ALT):\*\* Elevated levels of AST (237-259 Units/L) and ALT (150-154 Units/L) suggest possible liver injury. \* \*\*Anion Gap:\*\* The anion gap was elevated at both admission (10) and during the stay (12 and 19), indicating a metabolic disturbance that requires assessment. \* \*\*Calcium:\*\* Calcium levels fluctuated between 9.3 mg/dL (in-stay) and 9.8 mg/dL (in-stay), requiring additional data to interpret clinical significance. \* \*\*Glucose:\*\* Glucose levels varied from 96 mg/dL (admission) to 167 mg/dL (in-stay). Further data is required to determine the nature of this variation. \* \*\*Hematological parameters:\*\* Complete blood count shows some variations in MCH, MCHC, platelets, WBC, RBC, MCV, MPV, and RDW. More information would be needed to draw conclusions.

\*\*Microbiology Tests\*\*

NULL. No microbiology test results are included in the provided data.

## \*\*Physical Examination Results\*\*

The physical exam was performed and documented. A Glasgow Coma Scale (GCS) score of 15 (4+5+6) was recorded. Heart rate was 131 bpm, and the respiratory rate was 27 breaths per minute. Admission weight was 90 kg. Additional details are needed for a complete physical examination summary.

## \*\*Chart Description\*\*

- 1. \*\*Time Series Plot of Key Lab Values:\*\* A line graph would be ideal. The x-axis would represent time (in minutes from unit admission), and the y-axis would represent the lab value (e.g., sodium, potassium, creatinine, glucose, etc.). Each lab value would be represented by a different colored line. This visualization would effectively show the trends and fluctuations of these critical lab values over the patient's ICU stay, highlighting potential abnormalities and their temporal relationships.
- 2. \*\*Scatter Plot Matrix of Lab Values:\*\* A scatter plot matrix would visualize the correlations between various lab values. Each subplot would show the relationship between two different lab parameters (e.g., sodium vs. potassium, creatinine vs. BUN, etc.). The points would be colored according to the time (early, middle, or late in the stay) to reveal any patterns in the relationships over time. This would help identify potential underlying physiological relationships or dependencies between different lab markers.

\*\*CSV Data\*\*

"CSV LabName, LabResult, Units, LabResultOffset (minutes from unit admit) Sodium, 134, mmol/L, -948 Sodium, 140, mmol/L, 482 Potassium, 3.2, mmol/L, -948 Potassium, 3.6, mmol/L, 482 Potassium, 3.8, mmol/L, 1516 Bicarbonate, 25, mmol/L, -948 Bicarbonate, 24, mmol/L, 482 Bicarbonate, 21, mmol/L, -2050 Chloride, 99, mmol/L, -948 Chloride, 100, mmol/L, -2050 Chloride, 104, mmol/L, 482 BUN, 5, mg/dL, -948 BUN, 6, mg/dL, 482 BUN, 10, mg/dL, -2050 Creatinine, 0.6, mg/dL, -948 Creatinine, 0.6, mg/dL, 482 Creatinine, 0.7, mg/dL, -2050 Glucose, 96, mg/dL, -948 Glucose, 96, mg/dL, 482 Glucose, 167, mg/dL, -2050 AST (SGOT), 259, Units/L, -2050 AST (SGOT), 237, Units/L, 482 ALT (SGPT), 150, Units/L, -2050 ALT (SGPT), 154, Units/L, 482 Anion Gap, 10,, -948 Anion Gap, 12,, 482 Anion Gap, 19,, -2050 Calcium, 9.4, mg/dL, -948 Calcium, 9.3, mg/dL, 482 Calcium, 9.8, mg/dL, -2050 Total Protein, 8.3, g/dL, -2050 Total Protein, 7.1, g/dL, 482 Albumin, 5, g/dL, -2050 Albumin, 4, g/dL, 482 Total Bilirubin, 0.8, mg/dL, -2050 Total Bilirubin, 1.4, mg/dL, 482 Magnesium, 1.9, mg/dL, -490 Magnesium, 2.1, mg/dL, 1539 Heart Rate, 131, bpm, 20 Respiratory Rate, 27, breaths/min, 20

```}