Medical Report: Patient 005-10033

1. Patient Information

* **Patient Unit Stay ID:** 436993 * **Patient Health System Stay ID:** 372078 * **Unique Patient ID:** 005-10033 * **Gender:** Male * **Age:** 79 years * **Ethnicity:** Hispanic * **Hospital ID:** 143 * **Ward ID:** 259 * **Unit Type:** Med-Surg ICU * **Unit Admit Time:** 2014-XX-XX 21:40:00 (Assuming a date is missing from the data) * **Unit Admit Source:** Operating Room * **Unit Discharge Time:** 2014-XX-XX 18:50:00 (Assuming a date is missing from the data) * **Unit Discharge Location:** Floor * **Unit Discharge Status:** Alive * **Hospital Admit Time:** 2014-XX-XX 17:36:00 (Assuming a date is missing from the data) * **Hospital Admit Source:** Operating Room * **Hospital Discharge Year:** 2014 * **Hospital Discharge Time:** 2014-XX-XX 18:30:00 (Assuming a date is missing from the data) * **Hospital Discharge Location:** Home * **Hospital Discharge Status:** Alive * **Admission Height:** 180.3 cm * **Admission Weight:** 84.1 kg * **Discharge Weight:** NULL

2. History

Insufficient data provided to generate a detailed patient history. The available data only shows the admission diagnosis related to a hip replacement and subsequent diagnoses related to respiratory failure and a left lower extremity fracture. A complete history would require additional information such as presenting complaints, family history, social history, past medical history, and medication history.

3. Diagnoses

* **Primary Diagnosis:** Burns/Trauma - Skeletal Bone Fracture(s) - Left Lower Extremity (ICD-9 Code: NULL) * **Major Diagnosis:** Pulmonary Respiratory Failure - Acute Respiratory Failure - Drug Related - Residual General Anesthesia (ICD-9 Code: 518.5, J96.00)

4. Treatments

* **Orthopedics Consultation:** (Active upon discharge) * **Oxygen Therapy (40% to 60%):** (Active upon discharge) * **CPAP/PEEP Therapy:** (Active upon discharge) * **Mechanical Ventilation:** (Active upon discharge) * **Pulmonary/CCM Consultation:** (Active upon discharge) * **Tracheal Suctioning:** (Active upon discharge)

5. Vital Trends

Based on the physical examination, the following vital signs were recorded:

* **Heart Rate (HR):** Current 82 bpm, Lowest 80 bpm, Highest 84 bpm * **Blood Pressure (BP):** Systolic Current 139 mmHg, Systolic Lowest 83 mmHg, Systolic Highest 139 mmHg, Diastolic Current 86 mmHg, Diastolic Lowest 52 mmHg, Diastolic Highest 86 mmHg * **Respiratory Rate:** Current 18 breaths/min, Lowest 18 breaths/min, Highest 18 breaths/min * **Oxygen Saturation (O2 Sat):** Current 100%, Lowest 100%, Highest 100% * **FiO2:** 100% * **PEEP:** 5 cm H2O * **Ventilator Rate:** 18 breaths/min * **Weight:** Admission 84.1 kg

6. Lab Trends

The provided lab data includes a wide range of blood tests (hematology and chemistry) performed at multiple time points. A trend analysis requires plotting these values against time to identify patterns. This section will be elaborated in the visualization section of this report.

7. Microbiology Tests

NULL. No microbiology test data is available in the provided dataset.

8. Physical Examination Results

The patient was described as ill-appearing and cachectic, and in acute distress. A structured physical exam was performed. The patient was sedated. The Glasgow Coma Scale (GCS) was estimated as 12 (3+4+5) due to medication effects.

Further Notes: The provided data lacks specific timestamps for many lab results and some vital signs, making precise trend analysis and a complete medical history difficult. Additional data is needed for a comprehensive report. The date of admission and discharge is not included in the provided data and assumed to be missing.

Word Count: 586 words

2. Chart Description

Visualization 1: Time Series Plot of Key Lab Values

* **X-axis:** Time since unit admission (in minutes or hours). * **Y-axis:** Lab Result Value (with appropriate units for each lab test). * **Grouping/Color-coding:** Each line represents a different lab test (e.g., Hemoglobin, Hematocrit, Sodium, Potassium, Creatinine, BUN, Glucose, etc.). * **Rationale:** This visualization will effectively show trends in critical lab values over the patient's ICU stay. Changes in these values over time can indicate the effectiveness of treatments, the progression of the patient's condition, and the presence of any complications. For example, a decreasing creatinine level would suggest improvement in kidney function. A rising white blood cell count might signal an infection. The time series nature of the plot is crucial for interpreting these changes within the context of the patient's overall trajectory. Note that this visualization would only be fully informative if the time (labresultoffset) values were more regularly spaced.

Visualization 2: Hematology Panel Comparison

* **X-axis:** Different Hematology Lab Tests (e.g., Hemoglobin, Hematocrit, Platelets, WBC, etc.). * **Y-axis:** Lab Result Value (with appropriate units). * **Grouping/Color-coding:** Different colours for different time points (e.g., admission, 24 hours post-admission, discharge). * **Rationale:** This bar chart allows for a direct comparison of different hematology parameters at different time points. It will help visualize the overall hematological profile of the patient and how it changed during the ICU stay. This would be particularly useful in assessing the patient's response to treatment and to identify any significant abnormalities. The chart would be more informative if the time points were more consistently recorded.

Word Count: 235 words

3. CSV Data

The CSV data below includes selected lab values that show some apparent temporal trends. Note that the time points are not uniformly sampled and some values are missing.

```csv TimeOffset,Hemoglobin (g/dL),Hematocrit (%),Platelets (K/mcL),WBC (K/mcL),Creatinine (mg/dL),BUN (mg/dL),Glucose (mg/dL),Sodium (mmol/L),Potassium (mmol/L),Chloride (mmol/L),Bicarbonate (mmol/L),Anion Gap,Albumin (g/dL),Total Bilirubin (mg/dL),Alkaline Phos (Units/L),Total Protein (g/dL),pH,paO2 (mmHg),paCO2 (mmHg),FiO2 (%),O2 Content (mL/dL),Base Excess (mEq/L),PEEP (cm H2O),Respiratory Rate (/min),O2 Sat (%)
-4550,12.2,37.1,197,9.7,4.2,35,113,146,4.8,107,25,14,2.7,0.6,107,4.6,7.324,175.6,38.3,100,16.6,-6,5,NULL,99.2
-3360,NULL,NULL,NULL,NULL,3.5,37,112,147,4.7,111,21,15,3.1,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL
-2106,11.3,34.7,169,7.8,2.5,NULL,87,144,4,109,24,11,2.7,0.5,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL
-693,NULL,34.4,189,7.2,1.9,28,96,141,4.2,105,24,12,2.6,NULL,161,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL
38,10.1,31,180,9.1,1.6,23,124,139,4,107,22,10,NULL,0.3,NULL,NULL,7.386,148.4,39.4,100,15.7,-1.7,5,18,99
651,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,21.5,NULL,NULL,0.3,NULL,NULL,7.495,236.2,28.5,100,15.6,-1,
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5,18,99.6 676,10.1,30.8,218,8.9,NULL,22,NULL,NULL,NULL,22,NULL,NULL,2.2,NULL,161,4.6,NULL,NULL,NULL,NULL,
NULL,NULL,NULL,NULL 939,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,22.8,NULL,NULL,0.6,NULL
,NULL,7.507,173.8,29.4,50,14.5,0.3,5,NULL,98.9 1035,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,2
3.3,NULL,NULL,0.8,NULL,NULL,7.513,127.6,29.6,50,14.6,0.9,5,8,98.9 1198,NULL,NULL,NULL,NULL,NULL,NULL,NULL,
NULL,NULL,NULL,23.6,NULL,NULL,0,NULL,NULL,7.489,124.3,31.7,40,13.2,0.6,NULL,NULL,98.9
2080,8.5,26.7,264,5.8,2,116,266,138,5.3,105,20,13,1.8,0.2,77,4.3,NULL,87.2,31.4,NULL,13.4,-2.9,NULL,NULL,96.1 2155
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ULL,NULL,NULL,NULL,NULL 2420,9.1,27.5,171,7.2,1.3,22,95,139,4,107,23,9,NULL,NULL,NULL,NULL,NULL,NULL,NUL
L,NULL,NULL,NULL,NULL,NULL
3507,8.9,27,205,6.8,1.2,20,83,141,3.9,107,22,10,2.1,0.6,231,4.6,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL 5120
,NULL,NULL,NULL,NULL,1.2,19,76,141,3.7,105,23,13,2.4,1,261,5.3,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL
6573,10.6,31.2,306,6.8,1.1,17,96,141,3.6,105,24,12,2.7,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL,NULL

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**Word Count:** 112 words

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