- \*\*Medical Report for Patient 006-115302\*\*
- \*\*1. Patient Information:\*\*
- \* \*\*Patient Unit Stay ID:\*\* 866114 \* \*\*Unique Patient ID:\*\* 006-115302 \* \*\*Gender:\*\* Female \* \*\*Age:\*\* 82 \* \*\*Ethnicity:\*\* Caucasian \* \*\*Hospital Admit Time:\*\* 2014-XX-XX 05:55:00 \* \*\*Hospital Admit Source:\*\* Emergency Department \* \*\*Hospital Discharge Time:\*\* 2014-XX-XX 01:58:00 \* \*\*Hospital Discharge Location:\*\* Skilled Nursing Facility \* \*\*Hospital Discharge Status:\*\* Alive \* \*\*Unit Type:\*\* Med-Surg ICU \* \*\*Unit Admit Time:\*\* 2014-XX-XX 06:28:00 \* \*\*Unit Admit Source:\*\* Emergency Department \* \*\*Unit Discharge Time:\*\* 2014-XX-XX 02:37:00 \* \*\*Unit Discharge Location:\*\* Floor \* \*\*Unit Discharge Status:\*\* Alive \* \*\*Admission Weight:\*\* 50 kg \* \*\*Discharge Weight:\*\* 42.5 kg \* \*\*Admission Height:\*\* 158 cm \* \*\*Admission Diagnosis:\*\* Pneumonia, bacterial

\*\*2. History:\*\*

The provided data does not contain a detailed patient history. More information is needed to complete this section. The admission diagnosis indicates bacterial pneumonia, suggesting a likely respiratory illness presentation. The presence of sepsis and shock/hypotension suggests a systemic inflammatory response potentially related to the pneumonia. A prior history of acute COPD exacerbation is also noted, indicating a pre-existing respiratory condition that may have contributed to the current illness severity. The lack of further historical details limits a comprehensive understanding of the patient's journey leading to this ICU admission.

- \*\*3. Diagnoses:\*\*
- \* \*\*Primary Diagnosis:\*\* Acute COPD exacerbation (ICD-9: 491.21, J44.1) \* \*\*Secondary Diagnoses:\*\* \* Pneumonia (ICD-9: 486, J18.9) \* Sepsis (ICD-9: 038.9, A41.9) \* Shock/Hypotension

The patient presented with acute COPD exacerbation, a condition characterized by worsening of chronic obstructive pulmonary disease symptoms. This was complicated by bacterial pneumonia, a lung infection that likely contributed to the development of sepsis (a life-threatening response to infection) and accompanying shock/hypotension (low blood pressure). It is important to note that one acute COPD exacerbation diagnosis was inactive upon discharge, suggesting a possible improvement or resolution during the ICU stay. The specific factors triggering this exacerbation and the pneumonia are not detailed in the available data.

- \*\*4. Treatments:\*\*
- \* \*\*Non-invasive ventilation:\*\* This treatment was administered for managing respiratory issues, likely related to the pneumonia and COPD exacerbation. The duration and effectiveness of this treatment are not specified.

The patient received non-invasive ventilation, a respiratory support strategy to improve oxygenation and ventilation without the need for endotracheal intubation. The initiation and cessation times for this treatment are recorded, but the specific parameters and response to therapy require additional information for a complete assessment.

\*\*5. Vital Trends:\*\*

NULL. Vital signs data (heart rate, blood pressure, respiratory rate, oxygen saturation) are not available in the provided data set.

\*\*6. Lab Trends:\*\*

The provided lab data shows multiple blood tests performed at different time points during the patient's ICU stay. Key observations include:

\* \*\*Electrolytes:\*\* Sodium levels fluctuated, initially low (130 mmol/L) and improving to 139 mmol/L. Potassium levels were relatively stable, ranging from 3.7 to 4.5 mmol/L. Chloride levels showed some variation. Bicarbonate levels were initially low (23 mmol/L), and increased to 29-31 mmol/L. Anion gap was elevated (initially 9, then 5-8). These electrolyte imbalances likely reflect the severity of the illness. Calcium levels initially low (8.1 mg/dL) and improved to 8.3-8.7 mg/dL, potentially indicating a response to treatment. \* \*\*Renal Function:\*\* BUN (blood urea nitrogen) showed some fluctuation, ranging from 10 to 22 mg/dL, indicating possible renal involvement or dysfunction associated with the patient's condition. \* \*\*Liver Function:\*\* ALT (alanine aminotransferase) was elevated at 29-40 Units/L, indicating possible liver involvement or damage. \* \*\*Glucose:\*\* Blood glucose levels were significantly elevated (185-209 mg/dL), indicating hyperglycemia, likely secondary to the patient's critical illness. The glucose improved to 109-121 mg/dL, potentially reflecting treatment or improvement in overall condition. \* \*\*Complete Blood Count: \*\* Hemoglobin (Hgb), hematocrit (Hct), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), white blood cell count (WBC), platelets, and differential counts (-monos, -polys, -lymphs, -bands, -eos, -basos) suggesting both inflammatory processes and potential anemia. The trends in these values over time would be important for assessing the patient's overall response to treatment. \* \*\*Cardiac biomarkers:\*\* BNP (brain natriuretic peptide) was elevated at 17 pg/mL indicating potential cardiac strain. \* \*\*Lactate: \*\* Lactate levels were elevated (1.7-1.8 mmol/L) indicating tissue hypoxia, which could be a consequence of the respiratory failure and shock/hypotension. \* \*\*Blood Gas:\*\* FiO2 (fraction of inspired oxygen) was 40%, indicating the need for supplemental oxygen.

More frequent laboratory data is needed to fully interpret these trends and determine the effectiveness of interventions.

\*\*7. Microbiology Tests:\*\*

NULL. No microbiology data (e.g., blood cultures, sputum cultures) are included in the provided dataset.

\*\*8. Physical Examination Results:\*\*

\* \*\*Heart Rate (HR):\*\* 89 (lowest), 94 (highest) bpm \* \*\*Blood Pressure (BP):\*\* 96/49 mmHg (current), 98/47 mmHg (lowest), 113/59 mmHg (highest). Blood pressure measurements are indicative of hypotension. \* \*\*Respiratory Rate (RR):\*\* 28 (lowest and current), 30 (highest) breaths per minute. This indicates tachypnea. \* \*\*Oxygen Saturation (SpO2):\*\* 92% (lowest, highest, and current). This is below expected normal values, indicating potential hypoxemia. \* \*\*Weight:\*\* 50 kg (admission), 39 kg (current), -11 kg (delta). The significant weight loss during the ICU stay reflects the severity of illness. \* \*\*Glasgow Coma Scale (GCS):\*\* 13 (Eyes: 3, Verbal: 4, Motor: 6) This suggests a mild level of impairment in the patient's consciousness.

The physical examination reveals important findings related to the patient's respiratory and cardiovascular status. The elevated heart rate, low blood pressure, and tachypnea suggest the patient's body is under considerable stress. The weight loss is significant and warrants further investigation. The GCS score, though within a mild range, needs to be monitored closely for any changes.