



THE UNIVERSITY OF KANSAS HEALTH SYSTEM

Name: Jess Ann Biviano | DOB: 2/26/1986 | MRN: 1413312 | PCP: Erik Way, MD | Legal Name: Jessica Ann Biviano

COMPREHENSIVE METABOLIC PANEL

Collected on Aug 05, 2025 9:03 AM



Lauren K Bonci, APRN-NP Aug 11, 8:57 AM

Jess- here's what I found to help explain the elevated 24 hour creatinine and CK:

Most Likely Diagnoses:

1. Benign macro-CK isoenzyme presence: Macro-CK, particularly type 1 (immunoglobulin-bound CK), can cause mild, persistent elevations in serum CK without true muscle injury or renal dysfunction. This phenomenon is more common in women and may be associated with autoimmune conditions. The CK elevation is typically modest, as seen here, and does not correlate with clinical symptoms or other markers of muscle damage.[1]
2. High muscle mass or recent exercise: Individuals with increased muscle mass or those who have recently engaged in physical activity may have mildly elevated CK levels. This is a physiological response and not indicative of pathology. The literature on exertional rhabdomyolysis notes that CK can be elevated after exercise, but levels in rhabdomyolysis are typically much higher than observed here.[2]
3. Minor muscle injury or intramuscular injection: Small, subclinical muscle injuries or recent intramuscular injections can cause transient, mild CK elevations without other laboratory abnormalities.

I don't think we need to do any additional testing or evaluation at this time, but please let me know if you have any questions or concerns.

Results

Sodium

Normal range: 137 - 147 mmol/L



Potassium

Normal range: 3.5 - 5.1 mmol/L



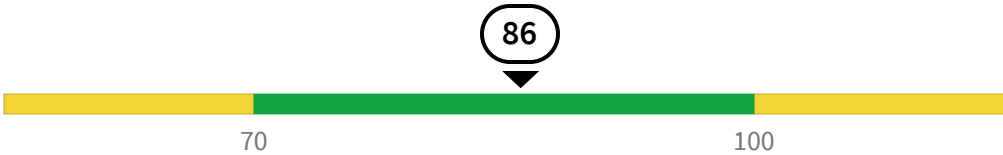
Chloride

Normal range: 98 - 110 mmol/L



Glucose

Normal range: 70 - 100 mg/dL



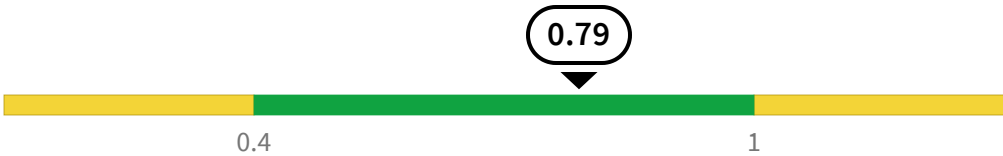
Blood Urea Nitrogen

Normal range: 7 - 25 mg/dL



Creatinine

Normal range: 0.40 - 1.00 mg/dL



Calcium

Normal range: 8.5 - 10.6 mg/dL



Total Protein

Normal range: 6.0 - 8.0 g/dL



Total Bilirubin

Normal range: 0.2 - 1.3 mg/dL



Albumin

Normal range: 3.5 - 5.0 g/dL



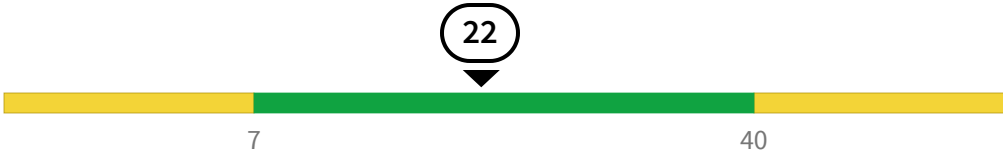
Alk Phosphatase

Normal range: 25 - 110 U/L



AST

Normal range: 7 - 40 U/L

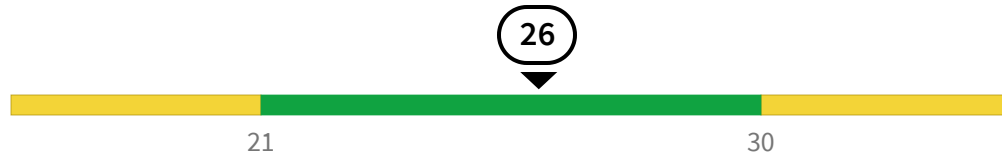


ALT

Normal range: 7 - 56 U/L

**CO2**

Normal range: 21 - 30 mmol/L

**Anion Gap**

Normal range: 3 - 12

**Glomerular Filtration Rate (GFR)**

Normal range: above >60 mL/min

Value

>60MALE: $eGFR_{cr} = 142 \times \min(Scr/k, 1)^a \times \max(Scr/k, 1)^{-1.200} \times 0.9938^{Age}$ FEMALE: $eGFR_{cr} = 142 \times \min(Scr/k, 1)^a \times \max(Scr/k, 1)^{-1.200} \times 0.9938^{Age} \times 1.012$

Scr = standardized serum creatinine in mg/dL

k = 0.7 (females) or 0.9 (males)

a = -0.241 (female) or -0.302 (male)

min(Scr/k, 1) is the minimum of Scr/k or 1.0

max(Scr/k, 1) is the maximum of Scr/k or 1.0

Age (years)

Ordering provider: Lauren K Bonci, APRN-NP

Collection date: Aug 05, 2025 9:03 AM

Specimens: Blood (Venous)

Result date: Aug 05, 2025 9:48 AM

Result status: Final

Resulting lab:

TUKHS DEPT PATH AND LAB MEDICINE

4000 Cambridge St.

Kansas City KS 66160

Amitava Dasgupta, MD (Lab director)

17D0448802 (CLIA #)

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