

Chemistry Values for Newborn Elephants*		
Parameter	Mean ± SD	Range
Alkaline phosphatase (ALP) (U/L)	174.0 ± 41.2	123.0–226.0
Aspartate aminotransferase (AST) (U/L)	70.7 ± 130.6	8.0–337.0
Alanine aminotransferase (ALT) (U/L)	3.8 ± 1.3	2.0–5.0
Creatine kinase (CK) (U/L)	228.3 ± 138.3	91.0–402.0
Albumin (g/dl)	3.4 ± 0.7	2.8–4.6
Total protein (g/dl)	7.2 ± 0.9	6.7–9.0
Globulin (g/dl)	3.9 ± 0.4	3.4–4.4
Total bilirubin (mg/dl)	1.3 ± 0.9	0.1–2.4
Blood urea nitrogen (BUN) (mg/dl)	6.5 ± 3.9	3.0–13.0
Creatinine	3.0 ± 0.7	2.0–3.9
Cholesterol (mg/dl)	39.0 ± 17.6	24.0–64.0
Glucose (mg/dl)	85.8 ± 20.8	67.0–112.0
Calcium (mg/dl)	10.5 ± 0.8	9.8–11.3
Phosphorus (mg/dl)	5.9 ± 1.9	4.0–9.6
Chloride (mEq/L)	92.4 ± 7.0	86.0–100.0
Potassium (mEq/L)	4.5 ± 0.5	4.0–5.2
Sodium (mEq/L)	133.5 ± 5.9	126.0–140.0

*Values are for newborn elephants (n=4-6).

Alkaline phosphatase (ALP), aspartate amino- transferase (AST), phosphorus, total bilirubin, and creatinine were higher in neonates compared to elephants of all other ages whereas alanine aminotransferase (ALT), total protein, globulins, and blood urea nitrogen (BUN) were lower. Cholesterol, glucose, calcium, chloride, potassium, albumen, and sodium were comparable to values for elephants in other age groups. Wiedner E, Kiso WK, Aria J, Isaza R, Lindsay W, Jacobson G, Jacobson K, Schmitt D. **Vital Signs and First Occurrences In Normal and Abnormal Newborn Asian Elephant**