

[P-37]**Effect of Transportation Stress on Blood Parameters in
Cynomolgus Monkeys**

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Various parameters of blood may be fluctuated by environmental factors such as transportation stress including diet, temperature, and so on). Thirty five 3- to 5 years-old cynomolgus monkeys were imported from Japan to evaluate potential toxic effect of a new biopharmaceutical. Nineteen male and sixteen female monkeys were subjected to 3-week quarantine prior to toxicological study and their blood were analyzed to ascertain baseline level of RBC(red blood cells)-, WBC(white blood cells)-related and biochemical parameters. For sex dependent differences, male monkeys showed statistically higher levels in RBC, HB(he- moglobin), HCT(hematocrit), MCH(mean corpuscular hemoglobin), MCHC(mean corpuscular hemoglobin concentration), WBC when compared with those of female monkeys, and male monkeys also showed statistically higher levels in AST, ALP, TCHO, A/G, CK, TBIL, P, and Cl. The environmental factor such as transportation stress caused the changes in RBC, HB, HCT, MCV, MCHC, WBC in male monkeys for 3-weeks quarantine, while it induced the changes in MCV, MCHC, and WBC in female monkeys. And it also affected some changes in percentages of neutrophil and lymphocyte in differential count of WBC. Thus, the present finding indicates that the transportation stress may affect blood parameters in cynomolgus monkey. In case of monkey study after transportation, the fluctuation of blood parameter levels should be under consideration when evaluating the results of hematological examination. The findings of the present study can be used as a valuable data for the safety evaluation of new drugs using cynomolgus monkey.