

M03: Peripheral Blood Leukocyte Cell Differential

Study Number: I10353

Test Compound: Benzo(a)pyrene

Date: 03 Sep 2024

DTTID: 103-005-002-000-1

CAS Number: 50-32-8

Time: 12:53:45 PM

Study Type: Immune screening

DTXSID: DTXSID2020139

Species/Strain: Mouse/B6C3F1/N

Females: Immunopath

	Treatment Groups								
	0 mg/kg	2 mg/kg	5 mg/kg	9 mg/kg	19 mg/kg	38 mg/kg	75 mg/kg	150 mg/kg	50 mg/kg CPS
Leukocytes (x10 ³ /µL)	4.633 ± 0.407[8]**	4.518 ± 0.377[8]	4.450 ± 0.283[8]	4.648 ± 0.411[8]	4.860 ± 0.377[8]	3.946 ± 0.587[8]	4.056 ± 0.326[8]	3.159 ± 0.329[8]*	1.435 ± 0.204[8]**
Absolute counts									
Lymphocytes (x10 ³ /µL)	3.906 ± 0.329[8]**	3.844 ± 0.296[8]	3.845 ± 0.213[8]	4.018 ± 0.342[8]	4.214 ± 0.317[8]	3.331 ± 0.480[8]	3.546 ± 0.290[8]	2.463 ± 0.259[8]**	1.280 ± 0.182[8]**
Neutrophils (x10 ³ /µL)	0.524 ± 0.063[8]	0.481 ± 0.082[8]	0.418 ± 0.063[8]	0.451 ± 0.059[8]	0.465 ± 0.047[8]	0.450 ± 0.095[8]	0.376 ± 0.035[8]	0.575 ± 0.064[8]	0.101 ± 0.017[8]**
Monocytes (x10 ³ /µL)	0.088 ± 0.013[8]	0.081 ± 0.012[8]	0.084 ± 0.015[8]	0.074 ± 0.012[8]	0.066 ± 0.007[8]	0.066 ± 0.014[8]	0.068 ± 0.008[8]	0.060 ± 0.008[8]	0.018 ± 0.005[8]**
Eosinophils (x10 ³ /µL)	0.088 ± 0.015[8]**	0.078 ± 0.012[8]	0.069 ± 0.006[8]	0.074 ± 0.013[8]	0.075 ± 0.021[8]	0.073 ± 0.018[8]	0.038 ± 0.005[8]**	0.040 ± 0.008[8]**	0.019 ± 0.007[8]**
Basophils (x10 ³ /µL)	0.005 ± 0.002[8]	0.008 ± 0.003[8]	0.006 ± 0.002[8]	0.005 ± 0.002[8]	0.008 ± 0.002[8]	0.004 ± 0.002[8]	0.008 ± 0.002[8]	0.004 ± 0.002[8]	0.000 ± 0.000[8]*
Large Unstained Cells (x10 ³ /µL)	0.025 ± 0.004[8]*	0.025 ± 0.003[8]	0.025 ± 0.004[8]	0.024 ± 0.003[8]	0.030 ± 0.005[8]	0.021 ± 0.005[8]	0.024 ± 0.004[8]	0.014 ± 0.002[8]	0.016 ± 0.003[8]
Relative counts									
Percent Lymphocytes (%)	84.61 ± 0.89[8]	85.38 ± 1.01[8]	86.79 ± 1.05[8]	86.69 ± 0.79[8]	86.85 ± 0.70[8]	84.89 ± 1.18[8]	87.41 ± 0.72[8]	77.96 ± 0.97[8]	89.16 ± 0.77[8]**
Percent Neutrophils (%)	11.20 ± 0.71[8]	10.39 ± 0.91[8]	9.09 ± 0.83[8]	9.64 ± 0.60[8]	9.54 ± 0.47[8]	10.94 ± 1.01[8]	9.33 ± 0.62[8]	18.18 ± 0.91[8]	7.11 ± 0.55[8]**
Percent Monocytes (%)	1.80 ± 0.17[8]	1.71 ± 0.14[8]	1.81 ± 0.24[8]	1.60 ± 0.18[8]	1.43 ± 0.11[8]	1.61 ± 0.19[8]	1.63 ± 0.12[8]	1.89 ± 0.20[8]	1.24 ± 0.16[8]*
Percent Eosinophils (%)	1.79 ± 0.21[8]**	1.78 ± 0.25[8]	1.59 ± 0.16[8]	1.48 ± 0.17[8]	1.48 ± 0.32[8]	1.91 ± 0.55[8]	0.93 ± 0.07[8]*	1.35 ± 0.23[8]*	1.39 ± 0.47[8]
Percent Basophils (%)	0.14 ± 0.02[8]	0.19 ± 0.02[8]	0.15 ± 0.03[8]	0.14 ± 0.03[8]	0.13 ± 0.03[8]	0.13 ± 0.05[8]	0.15 ± 0.03[8]	0.15 ± 0.03[8]	0.05 ± 0.02[8]**
Percent Large Unstained Cells (%)	0.51 ± 0.04[8]	0.59 ± 0.07[8]	0.54 ± 0.06[8]	0.46 ± 0.03[8]	0.56 ± 0.06[8]	0.53 ± 0.06[8]	0.58 ± 0.06[8]	0.49 ± 0.05[8]	1.04 ± 0.12[8]**

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LEGEND

Data are displayed as mean \pm SEM (N) unless otherwise noted.

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests. The positive control group (50 mg/kg CPS) was excluded from trend test.

Statistical analysis for the positive control group (50 mg/kg CPS) compared to the vehicle control group was performed using the Wilcoxon rank sum test.

Statistical significance for the control group indicates a significant trend test.

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group.

* Statistically significant at $P \leq 0.05$

** Statistically significant at $P \leq 0.01$

SEM = Standard Error of the Mean

SD = Study Day

CPS = Cyclophosphamide

Females from the vehicle control and treatment groups were removed on SD 28.

** END OF REPORT **